IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Norfolk Division

BASF PLANT SCIENCE, LP,

Plaintiff,

v.

COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION,

Defendant.

COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION, GRAINS RESEARCH AND DEVELOPMENT CORP., AND NUSEED PTY LTD.,

Plaintiff-Counterclaimants,

v.

BASF PLANT SCIENCE, LP, and CARGILL, INC.,

Defendants-Counterdefendants.

CIVIL ACTION NO.
2:17cv503

TRANSCRIPT OF PROCEEDINGS
(Jury Trial - Day 11)

Norfolk, Virginia

October 31, 2019

BEFORE: THE HONORABLE HENRY COKE MORGAN, JR.
United States District Judge, and a jury

APPEARANCES:

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PORTER HEDGES LLP
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Teresa Summers
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By: Ahmed J. Davis
Christopher R. Dillon
Elizabeth Flanagan
Daniel R. Gopenko
Counsel for Cargill, Inc.

I N D E X

E X H I B I T S

(Proceedings commenced at 9:56 a.m.)

THE COURT: All right. I received proposed amended instructions from CSIRO.

It's not necessary for you to stand up.

The parties were told the day before the charging conference that the Court was particularly interested in instructions on this subject because it was unique to the case. We had our charging conference. Any instruction such as this should have been submitted prior to the scheduling conference. This instruction is not timely or appropriate.

I asked counsel yesterday if they had anything further to offer, and they didn't, and we closed the instruction conference. You can't come in and put something in evidence after that's closed and all the instructions have been agreed upon by the parties.

Apparently, the proponents want their damage expert to be in the court. Is there any objection to that?

MR. DAVIS: For clarity, Your Honor, it's -- well, I think --

THE COURT: Or is it the opponents?

MR. DAVIS: It's the opponents, and it's not our damages expert, it's Dr. Gromov, who is a Cargill fact witness. He was scheduled to testify in phase 3, and I just wanted to ask for the Court's guidance about whether he could stay for closing.

One thing I would say is that Cargill has not designated, to date, a corporate witness, and so if that would resolve the issue, we would make him the corporate witness for Cargill for the proceedings, and then that would resolve it, as the other corporate witnesses have stayed in the court.

THE COURT: Is there any objection to him being in the courtroom?

MR. NG: If he's being designated as a corporate representative, then no.

THE COURT: All right. Are we ready for the jury?

MR. ZAHEER: Yes, Your Honor.

MS. SHAW: Your Honor, just one minor thing.

We have -- the parties have agreed to a stipulation of undisputed facts, and I've got it marked as an exhibit to submit to the Court.

THE COURT: Is that the one from the pretrial order?

MS. SHAW: Yes, Your Honor.

THE COURT: Okay.

MS. SHAW: I have multiple copies. I don't know how many you need.

THE COURT: Well, I think the parties previously advised the Court that they were going to prepare it as an exhibit.

MS. SHAW: Your Honor, just for the record, it's

JX-069.

THE COURT: All right.

(Exhibit JX-069 received in evidence.)

THE COURT: All right. Bring in the jury.

(The jury entered the courtroom.)

THE COURT: Good morning, ladies and gentlemen.

As we discussed yesterday, we've reached the portion of the trial where the Court will give you its instructions, setting forth the law applicable to this particular case. After the Court reads you the instructions, counsel will have an opportunity to argue. I'm not sure how long it will take to read all the instructions -- there are quite a few of them -- but it's probably going to take more than an hour. So I'll probably tell you somewhere in the middle of the instructions to stand up and move around because it's difficult just to sit there and listen, without anything else going on, for so long.

The attorneys on both sides have the right to make an opening argument, as well as a rebuttal argument. The Court has allotted each side an hour and 15 minutes to argue, so it will probably be sometime after lunch before you begin your deliberations, just for your information.

All right. Now that you've heard all the evidence, it is the Judge's duty to give you the instructions of the Court concerning the law applicable to this case. It is your

duty as jurors to follow the law as the Judge states it to you and to apply the law to the facts as you find them from the evidence in the case. You must not base your verdict in any way upon sympathy, bias, guesswork, or speculation. Your verdict must be based solely upon the evidence and the instructions of the Court.

Counsel may quite properly refer to some of the governing rules of law in their arguments. If, however, any difference appears to you between the law as stated by counsel and that stated by the Judge in these instructions, you, of course, are to be governed by the instructions.

If any reference by the Judge or by counsel to matters of evidence does not coincide with your own recollection, it is your recollection which should control during your deliberations.

You're not to single out one instruction alone as stating the law but must consider the instructions as a whole. Neither are you to be concerned with the wisdom of any rule of law stated by the Judge. Regardless of any opinion you may have as to what the law is or what the law ought to be, it would be a violation of your sworn duty to base a verdict upon any view of the law other than that given in the instructions of the Judge, just as it would also be a violation of your sworn duty as judges of the facts to base a verdict upon anything other than the evidence in the case.

Justice through trial by jury must always depend upon the willingness of each individual juror to seek the truth as to the facts from the same evidence presented to all of the jurors and to arrive at a verdict by applying the same rules of law as given in the instructions of the Judge.

Both the parties and the public expect that you will carefully and impartially consider all of the evidence in the case, follow the law as stated by the Court, and reach a just verdict, regardless of the consequences. As stated earlier, it is your duty to determine the facts, and in so doing you must consider only the evidence the Court has admitted in the case.

Remember that any statements, objections, or arguments made by the lawyers are not evidence in the case. The function of the lawyers is to point out those things that are most significant or most helpful to their side of the case, and in so doing to call your attention to certain facts or inferences that might otherwise escape your notice.

It is the duty of the lawyer on each side of the case to object when the other side offers testimony or other evidence which the lawyer believes is not properly admissible. You should not draw any conclusions or be prejudiced against a lawyer or the party he or she represents because of the making of an objection.

There are, generally speaking, two types of evidence

from which a jury may properly find the truth as to the facts of the case. One is direct evidence, such as the testimony of an eye witness or the admission of a document. The other is indirect or circumstantial evidence, the proof of a chain of circumstances pointing to the existence or non-existence of certain facts. As a general rule, the law makes no distinction between direct and circumstantial evidence but simply requires the jury find the facts in accordance with the evidence of all -- in accordance with a preponderance of all the evidence in the case, both direct and circumstantial.

There are some issues that you must decide by clear and convincing evidence, as opposed to the preponderance of the evidence.

Now, the Court has said that you must consider all of the evidence. This does not mean, however, that you must accept all of the evidence as true or accurate. The evidence in the case consists of the sworn testimony of the witnesses, regardless of who may have called them, and all exhibits received in evidence, regardless of who may have produced them, and all facts which may have been admitted.

Any evidence as to which an objection was sustained by the Court and any evidence which the Court may have stricken must be entirely disregarded. Anything you have seen or heard outside the courtroom about this case is not evidence and must be entirely disregarded.

You are to consider only the evidence in the case, but in your consideration of the evidence, you are not limited to the bald statements of the witnesses. In other words, you're not limited solely to what you see and hear as the witnesses testify. You are permitted to draw from the facts you find have been proven such reasonable inferences as you feel are justified in the light of experience.

All corporations and business entities are entitled to fair and impartial treatment in this court, regardless of country of origin, relative size, and for-profit or nonprofit. Just as in the case of individual persons, your decisions must not be based upon sympathy, bias, or prejudice for or against any persons -- no. Excuse me.

Just as in the case of individual persons, your decision must not be based on sympathy, bias, or prejudice for or against any corporate entity. The case should be considered and decided by you as an action between parties of equal standing in the community, of equal worth, and holding the same or similar stations of life. All persons and corporations, foreign or domestic, stand equal before the law and are to be dealt with as equals in a court of justice in the United States.

You, the jurors, are the sole judges of the credibility of the witnesses and the weight their testimony deserves. You may be guided by the appearance and conduct of

the witness, or by the manner in which the witness testifies, or by the character of the testimony given, or by evidence to the contrary of the testimony given. You should carefully scrutinize all the testimony given, the circumstances under which each witness has testified, and every matter in evidence which tends to show whether a witness is worthy of belief.

Consider each witness's intelligence, motive, state of mind, and demeanor and manner while on the stand. Consider the witness's ability to observe the matters as to which he or she has testified and whether he or she impresses you as having an accurate recollection of these matters.

Consider also any relation each witness may bear to either side of the case, the manner in which each witness might be affected by the verdict, and the extent to which, if at all, each witness is either supported or contradicted by other evidence in the case.

Inconsistencies or discrepancy in the testimony of a witness or between the testimony of different witnesses may or may not cause the jury to discredit such testimony. Two or more persons witnessing an incident or a transaction may see or hear it differently, and innocent misrecollection, like failure of recollection, is not an uncommon experience. In weighing the effect of a discrepancy, always consider whether it pertains to a matter of importance or an

unimportant detail and whether the discrepancy results from innocent error or intentional falsehood. After making your own judgment, you will give the testimony of each witness such credibility, if any, as you may think it deserves.

You may, in short, accept or reject the testimony of any witness, in whole or in part. Also, the weight of the evidence is not necessarily determined by the number of witnesses testifying to the existence or non-existence of any fact. You may find that the testimony of a single witness or a small number of witnesses as to any fact is more convincing than the testimony of a larger number of witnesses to the contrary.

A corporation may act only through natural persons as its agents or employees. Generally, any agents or employees of a corporation may bind the corporation by their acts and declarations made while acting within the scope of their authority delegated to them by the corporation or within the scope of their duties as employees of the corporation.

During the trial, certain testimony has been presented by way of deposition. The deposition consisted of sworn, recorded answers to questions asked of the witness in advance of the trial by attorneys for the parties in the case. Such testimony is entitled to the same consideration and is to be judged as to credibility and weighed and

otherwise considered by you, insofar as possible, in the same way as if the witness had been present and had testified from the witness stand. The Court ordered that the deposition videos be edited by the parties before they were presented to you to remove objections by counsel that are not of your concern.

The rules of evidence may limit the ability of witnesses to testify as to opinions or conclusions. Greater latitude is given to those whom we call expert witnesses. Witnesses who, by education or experience, have become experts in some art, science, profession, or calling may state an opinion as to relevant and material matters as to which they possess expertise and may also state their reasons for the opinion.

The experts in this case were: One, Dr. Ljerka Kunst on behalf of the proponents; and, two, Dr. Denis Murphy on behalf of the opponents. Opinion testimony by qualified expert witnesses is competent evidence. You should consider each expert opinion received in evidence in this case and give each such opinion the weight you find it deserves.

You may disregard an expert opinion entirely if you should decide that any expert is unqualified or lacks objectivity or credibility, or if you should conclude that the factual basis or reasoning given in support of the opinion are not proven or sound, or that the opinion is

outweighed by other evidence.

During the course of a trial, the Judge occasionally asks questions of witnesses in order to bring out facts not then adequately explained by their testimony and to expedite the presentation of evidence. Do not presume that the Judge holds any opinion on the matters to which the Judge's questions may have related. Remember at all times that you, as jurors, are at liberty to disregard all questions by the Judge regarding the facts in determining the weight of the evidence, but you are governed by the Judge's instructions as to the law applicable to this case.

Nothing the Judge says, nor any ruling of the Judge, nor any remark which the Judge has made is to be taken as an indication that the Judge has any opinion of the facts of the case or what that opinion may be. It is the Judge's function to determine the law. The determination of the facts and the weight of the evidence is your function.

When one of the parties testifies unequivocally to facts within their own knowledge, those statements of fact and the necessary inferences from them are binding upon them. They cannot rely on other evidence in conflict with their own testimony to strengthen their case. However, you must consider their testimony as a whole, and you must consider a statement made in one part of their testimony in the light of any explanation or clarification made elsewhere in their

testimony.

During the trial, evidence was introduced that a witness had previously made a statement (given testimony) that was inconsistent with his or her testimony at this trial. The only purpose for which that evidence was admitted was its bearing on the witness's credibility. It is not proof that what the witness may have said earlier is true.

Certain exhibits have been shown to you during the trial that were illustrations. We call those types of exhibits "demonstrative exhibits" or sometimes just "demonstratives" for short. Demonstrative exhibits are a party's description, picture, or model to describe something involved in this trial. If your recollection of the evidence differs from the demonstrative, you should rely on your own recollection. Demonstrative exhibits are not evidence, but the witness's testimony concerning the demonstrative evidence may be evidence, if you find that they accurately illustrate the evidence to which they are directed.

A preponderance of the evidence in the case means such evidence, when considered and compared with the evidence opposed to it, has more convincing force and produces in your mind a belief that what is sought to be proved is more likely true than not true. To illustrate, if you were weighing the evidence on a scale and the scale tilted in favor of the person with the burden, then that person has proven his or

her element or claim by a preponderance of the evidence. In determining whether any fact in issue has been proven by a preponderance of the evidence, the jury may, unless otherwise instructed, consider the testimony of all the witnesses, regardless of who may have called them, and all exhibits received in evidence, regardless of who may have produced them.

It does not make any difference as to whether the exhibits are marked for the proponents or for opponents. The test is not which side brings the greater number of witnesses or presents the greater quantity of evidence, but which witnesses and which evidence appeal to your minds as being most accurate and otherwise trustworthy.

Clear and convincing evidence is evidence that produces in your mind a firm belief or conviction as to the matter at issue. Clear and convincing evidence involves a greater degree of persuasion than is necessary to meet the preponderance of the evidence standard. This standard does not require proof to an absolute certainty, since proof to an absolute certainty is seldom possible in any case.

I will now summarize the issues that you must decide at this stage of the case and for which I will provide instructions to guide your deliberations. You must decide the following issues:

Number one, whether proponents have proven by a

preponderance of the evidence that opponents' products infringe claim 20 of the '541 patent.

Two, whether opponents have proven by a preponderance of the evidence that they are co-owners of the patents-in-suit.

Three, whether opponents have proven by clear and convincing evidence that the patents-in-suit are invalid.

Before you can decide many of the issues in the case, you will need to understand the role of patent claims. The patent claims are the numbered sentences at the end of each patent. The claims are important because it is the words of the claims that define what a patent covers. The figures and text in the rest of the patent are intended to provide a description and/or examples of the invention and provide a context for the claims, but it is the claims that define the breadth of the patent's coverage. Each claim is effectively treated as if it was a separate patent, and each claim my cover more or less than another claim. Therefore, what a patent covers depends in turn on what each of its claims cover.

You will need to understand what each claim covers in order to decide whether or not there is infringement of the claim. The law says that it is the Judge's role to define the terms of the claims, and it is the Judge's role to apply the Judge's definitions to the issues that you are

asked to decide in the case. Therefore, as explained to you at the start of the case, you have been provided definitions of certain claim terms. You must accept these definitions of certain words in the claims as being correct. It is your job to take these definitions and apply them to the issues that you are deciding, including the issues of infringement, invalidity, and enforcement.

I will now explain how a claim defines what it covers. A claim sets forth in words a set of requirements. Each claim sets forth its requirements in a single sentence. If a device satisfies each of these requirements, then it is covered by the claim.

There can be several claims in a patent. Each claim may be narrower or broader than another claim by setting forth more or fewer requirements. The coverage of a patent is assessed claim by claim. In patent law, the requirements of a claim are often referred to as claim elements or claim limitations.

When a thing, such as a product or a process, meets all of the requirements of a claim, the claim is said to cover that thing, and that thing is said to fall been the scope of that claim. In other words, a claim covers a physical object, product, or process where each of the claim elements or limitations is present in that physical object, product, or process.

Sometimes the words in a patent claim are difficult to understand, and, therefore, it is difficult to understand what requirements these words impose. It is my job to explain to you the meaning of the words in the claims and requirements those claims impose. As I just instructed you, there are certain specific terms that I have defined, and you are to apply the definitions that I apply to you. By understanding the meanings of a word in a claim and by understanding that the words of a claim set forth the requirements that a product or process must meet in order to be covered by that claim, you will be able to understand the scope of coverage for each claim. Once you understand what a claim covers, you are then prepared to decide the issues that you will be asked to decide, such as infringement, invalidity, and enforcement.

All right. I think this would be a good time to take a little rest, stand up and move around, and so forth, while I organize the rest of the claims. You can stand, if you want to.

(There was a pause in the proceedings.)

THE COURT: All right, ladies and gentlemen. The Judge will now explain to you the meanings of some of the words of the claims in the case and explain some of the requirements of these claims. You must accept these definitions of the words in the claims as correct. For any

words in the claim for you that are not provided -- for any words in the claim -- excuse me. There's a grammatical error here.

For any words in the claim for which you are not provided with a definition, you should apply their common meaning. You should not take the definitions of the language of the claims as an indication that the Judge has a view regarding how you should decide on the issues that you're being asked to decide, such as infringement, invalidity, and enforceability. These issues are yours to decide.

The meanings of the words and group of words from the patent claims so provided are as follows. Now, again, I remind you that you'll have this all in writing.

There's a term that says "at least [X]%." The X will be a number, and since the numbers are different, that's why I put "[X]%." This term generally has its plain and ordinary meaning. Whether an upper limit is included depends on the context of the exact claim. The Court will determine whether such claim should be read into the asserted claims.

(There was a pause in the proceedings.)

THE COURT: I'll repeat that definition.

This claim generally has its plain and ordinary meaning. Whether an upper limit is included depends on the context of the exact claim. Less than [X]%, this term generally has its plain and ordinary meaning. Whether a

lower claim is included depends on the context of the exact claim.

Includes [X]%, that means the term means the same as comprises [X]%.

The next is a sequence number. You might remember that when the patents were being reviewed, it had S-E-Q ID number so and so, like 60-something or 100-something. That means sequence ID number, but it's abbreviated. No construction is necessary; this term means what it says.

The next term is "operably linked to one or more promoters that are capable of directing expression in the cell/seed." This term requires no construction.

The next is "a desaturate or an exogenous desaturate." This term has its plain and ordinary meaning.

Let me see counsel at the bench.

(The following was heard at the sidebar:)

THE COURT: I don't know how this instruction got through. Nobody amended it. It doesn't include any of the definitions that I gave which are in the materials that the jury has. We'll just have to do this instruction over.

Josh, this has to have the definitions that were given to the jury. Do you have access to those? Do you have the jury book?

THE LAW CLERK: I have the jury book right here.

THE COURT: This has to be changed right now.

THE LAW CLERK: Judge, my book does not contain the defined terms.

THE COURT: Aren't the definitions in the book?

THE LAW CLERK: Claim construction number 14. So which ones are we discussing?

THE COURT: Let me look at that.

THE LAW CLERK: This is an identical copy to what the jury has.

THE COURT: There should be another page here.

THE LAW CLERK: Is it in the back?

THE COURT: No. That does not contain the claim construction that I gave. That's wrong. You're going to have to find the claim constructions that I gave somewhere.

THE LAW CLERK: Okay. I'll pull them.

THE COURT: Is that the way it is in all the jury books? Because if it is, it's wrong.

(The following was heard in open court:)

THE COURT: Sorry, ladies and gentlemen, but the chart that is in your jury book is the same chart that is in that instruction, and I'm now investigating it, because it appears that your chart in the jury book is not complete.

So we have to make that correction first to your jury book and then insert it in the instruction.

Counsel can be working on that at the same time Josh is. It's wrong in the jury book. It's only one page long.

It leaves out a number of constructions.

All right. We'll move on.

This case involves two types of patent claims: independent claims and dependent claims. An independent claim sets forth all the requirements that must be met in order to be covered by that claim. Thus, it is not necessary to look at any other claim to determine what an independent claim covers.

In this case, for example, claim 1 of the '880 patent is an independent claim. The remainder of the claims in the '880 patent are dependent claims. A dependent claim does not itself recite all of the requirements of the claim but refers to another claim for some of its requirements. In this way, the claim depends on another claim. A dependent claim incorporates all the requirements of the claim to which it refers.

Here, claim 2 depends from claim 1. The dependent claim then adds its own additional requirements. To determine what a dependent claim covers, it is necessary to look at both the dependent claim and any other claim to which it refers. A product that meets all the requirements of both the dependent claim and the claim to which it refers is covered by that dependent claim.

If that sounds confusing, remember you'll have it to read in the jury room, so you can straighten out that meaning

in your own mind. What it means is that claim 1 stands all by itself as its own independent requirement. That's called an independent claim. A dependent claim is an addition to claim 1, such as claim 2, which adds a requirement. But claim 2 incorporates all the claims in claim 1, plus what it says, if that's any clearer than what I read to you.

As I did at the start of the case, I will first give you a general summary of each side's contentions in this case. I will then provide you with detailed instructions on what each side must prove to win on each of its contentions.

As I previously told you, proponents alleged opponents by making, using, selling, offering for sale in the past and in the future the seeds, oils, and plants containing what is called elite event LBFLFK --

Okay. We've heard initials that mean something, like PUFA, which means polyunsaturated fatty acid. All right. This line of letters means nothing. It's just an arbitrary group of letters that somebody picked by computer or something. But, anyway, they're not an abbreviation for anything.

-- including plant lines by the name of -- and these don't have any meaning other than for identifying something -- 17PH9093, 17PH9095, 17PH9096. All of these plant lines and the elite event are alleged to infringe the following claims.

Okay. Group A. Remember we talked about Group A, B, D, and E. I don't remember any Group C, but we talked about Group A, B, D, and E. I'm only going to give you the last three numbers of the patent, because that's how we've been referring to them.

Group A contains claim 1 and claim 33 of patent '357. Secondly, it contains claim 5 of patent '579. Third, it contains claim 5 of patent number '033. Four, it contains claims 2 and 10 of patent number '880.

All right. Moving on to Group B, which is a group of one, it contains patent number '792.

Group D, also a group of one, contains claim 20 of patent number '541.

And Group E contains claim 1 of patent number '084.

I will refer to these claims collectively as the asserted claims and the patents collectively as the patents-in-suit.

BASF's elite event, LBFLFK, and Cargill's plant lines 17PH9093, 17PH9095, and 17PH9096 are the products accused of patent infringement. I will refer to these products collectively as "the accused products."

Opponents argue that the asserted claims are invalid or unenforceable. The opponents also argue that the accused patents do not infringe claim 20 of the '541 patent. It is your job to decide whether the asserted claims of the

patents-in-suit are infringed by the accused products and are valid and enforceable.

All right. Now, instruction 20 contains a further description of the patents and tells you something about how to find them in your book. And I'm not going to read all the numbers, because you're going to have all the numbers in the instruction which is given to you.

All right. Before you decide whether the proponents' -- CSIRO, Nuseed, and GRDC -- patents are invalid or whether BASF and Cargill has infringed the claims of these patents, you will have to understand the patent claims. The patent claims are numbered sentences at the end of the patent. The patent claims here are -- and we've got the exact page to go to, and, in addition to that, these assembled claims are highlighted in blue, I hope, in the copies of the patent contained in your binders.

The yellow claims highlighted in the copies of your binders are not themselves asserted but are claims from which an asserted claim depends.

Now, remember, if it's a dependent claim, then it's included in any claim which depends on it. So if you have a dependent claim, you must look at both the dependent claim and the independent claim on which it depends to get all of the requirements of the claim.

These claims are intended to define in words the

boundaries of the inventors' rights. Only the claims of the patent may be infringed. Neither the written description nor the drawings of a patent can be infringed. Each of the claims must be considered individually. You must use the same claim meaning for both your decisions on infringement and your decisions on invalidity and enforceability.

To determine infringement under claim 20 of the '541 patent, you must compare each of the accused products with that claim using the Court's instructions as to the meaning of the claim. A patent claim is infringed only if one or more of opponents' accused products include each and every element or method step in the patent claim under consideration.

If opponents' accused products do not contain one or more elements or method steps recited in the claim being considered, then the respective company does not infringe that claim. The accused products should be compared to the invention described in the patent claim if it is alleged to infringe.

The accused products should not be compared to the embodiments of proponents' patent in determining infringement. The same element or method step of the accused product may satisfy more than one element of a claim.

The question is, "What about Group C, patent '346, claim 13?"

That patent is no longer part of the case. Somebody is very observant, but that patent is no longer part of the case.

BASF and Cargill contend that the claims of the patent at issue are invalid because the claimed inventions are obvious. A claimed invention is obvious if it would have been obvious to a person of ordinary skill in the art of the claimed invention as of the date of invention.

What instruction number is that?

THE CLERK: 22.

THE COURT: Prior art to all of the patents-in-suit may include items that were publicly known or that had been used or offered for sale, publication, or patents that disclosed the claimed invention or elements of the claimed invention. To be prior art, the item or reference must have been made, known, used, published, or patented either before the invention was made or more than one year before the filing date of the patent application. However, prior art does not include a publication that describes the inventor's own work and was published less than one year before the date of the invention.

The date of invention is either when the claimed invention was reduced to practice, which can be the date the invention was fully described in a patent application that led to the asserted claim, was filed, sometimes referred to

as a constructive reduction to practice, or when conceived, provided the inventor was diligent in reducing the invention to practice.

Diligence means working continuously but not necessarily every day.

Conception is the mental part of an inventive act, that is, the formation in the mind of the inventor of a definite and permanent idea of the complete and operative invention as it is thereafter to be applied in practice, even if the inventor did not know at the time that the invention would work.

Conception of an invention is complete when the idea is so clearly defined in the inventor's mind that if the idea were communicated to a person having ordinary skill in the field of technology, he or she would be able to reduce the invention to practice without undue research or experimentation. The requirement does not mean that the inventor has to have a prototype built or actually explain his or her invention to another person, but there must be some evidence beyond the inventor's own testimony that corroborates the date on which the inventor had the complete idea.

Conception may be proven when the invention is shown in its complete form by drawings, disclosure to another person, or other forms of evidence presented at trial.

A claimed invention is reduced to practice when it has actually been constructed, used, or tested sufficiently to show that it will work for its intended purpose or when the inventor files a patent application. An invention may also reduce to practice, even if the inventor has not made or tested a prototype of the invention, if it has been fully described in the filed patent application.

What qualifies as prior art on whether a patent properly claims priority back to its initial application or the prior invention date of the patented claim, if proven. Therefore, different patents may have different priority dates. In this case, the opponents, BASF and Cargill, claim the following items of prior art:

As to the '579, '357, '033, and '880 patents, Olga F. Sayanova and Jonathan A. Napier --

All right. This next word requires a little study to pronounce.

MR. DAVIS: Aikosa Penta Einoic.

THE COURT: What?

MR. DAVIS: Aikosa Penta Einoic --

THE COURT: -- acid, biosynthetic roots, and the potential for synthesis in transgenic plants, 65 Phytochemistry 147-158, 2004, which is later referred to as Sayanova 2004.

Mercifully, I won't have to try to read that word

again.

Frederic Domergue, et al., Acyl Carriers Used As Substrates By the Desaturase and Elongases Involved in Very Long-Chain Polyunsaturated Fatty Acid Biosynthesis Reconstituted in Yeast, 278 (37 J Biol Chem.) 35115 to 35126, 2003, which is called Domergue 2003.

C, Production of Very Long Polyunsaturated Fatty Acids in Oilseed Plants, International Publication No. W02004/071467, which is called Kinney 2004.

As to the '792 patent, Sayanova 2004 and Kinney 2004.

The first factor in deciding obviousness based on prior art includes the following items introduced during the trial.

Now, I just told you that two of those apply to the '792 patent, and all three are claimed by the opponents to apply to '579, '357, '033, and '880.

All right. The first factor in deciding obviousness based on the prior art includes the following items, the ones I just read: Sayanova, which is identified as Joint Exhibit 39; Domergue, which is described as Joint Exhibit 66; Kinney, which is described as Joint Exhibit 67.

Joint Exhibit is JX. That's the way the exhibit is marked.

A prior art reference may be considered if it

discloses information designed to solve any problem or need addressed by the patent. A prior art reference may also be considered if it discloses information that has obvious use beyond its main purpose and if a person of ordinary skill in the art would reasonably examine that reference when trying to solve any problem or need addressed by the patent.

The second factor you must analyze is whether there are any relevant differences between the prior art and the claimed invention from the view of a person of ordinary skill in the art as of the dates in the third factor. Those are the dates of application or invention, and I'll give them to you later.

Your analysis must determine the impact, if any, of such differences on the obviousness or nonobviousness of the claimed invention as a whole and not merely some part of it.

In analyzing the relevance of the differences between the claimed invention and the prior art, you do not need to look for precise teaching in the prior art directed to the subject matter of the claimed invention. You may consider the inferences and creative steps that a person of ordinary skill in the art would have employed in reviewing the prior art at the time of the invention.

For example, if the claimed invention combined elements known in the prior art and the combination yielded results that were predictable to a person of ordinary skill

in the art at the time of the invention, then this evidence would make it more likely that the claim was obvious.

On the other hand, if the combination of known elements yielded unexpected or unpredicted results, or if the prior art teaches away from combining the known elements, then this evidence would make it more likely that the claim successfully combined those elements and was not obvious.

Importantly, a claim is not proven obvious merely by demonstrating that each of the elements was independently known in the prior art. Most, if not all, inventions rely upon building blocks long known and claimed discoveries, almost of necessity, will likely be combinations of what was already known. Therefore, you should consider whether a reason existed at the time of the invention that would have prompted a person of ordinary skill in the art in the relevant field to combine the teachings in the way the claimed invention does.

The reason would come from the prior art, the background knowledge of one of ordinary skill in the art, the nature of the problem or need to be addressed, market demand, or common sense. If you find that a reason existed at the time of the invention to combine the elements of the prior art to arrive at the claimed invention and there would have been a reasonable expectation of success for doing so, this evidence would make it more likely that the claimed invention

was obvious.

Similarly, you may consider the possibility that a reference teaches away from the claimed invention. A reference teaches away from the invention when it would have discouraged a person of ordinary skill in the art, as of the dates in the third factor, from practicing the claimed invention or when such a person would be led in a different direction when practicing the claimed invention. You must undertake this analysis separately for each claim that opponents contend is obvious.

The third factor provides that the question of invalidity of a patent is determined from the perspective of a person of ordinary skill in the art in the field of the claimed invention as of the dates below.

Remember, we said in the prior instruction that you had to consider the dates in the third factor. These are the dates you have to consider.

Claim 5 of the '579 patent, claim 5 of the '033 patent, claims 1 and 33 of the '357 patent, and claims 2 and 8 of the '880 patent, the date is in dispute. BASF/Cargill assert that the date should be no earlier than April 2, 2004. CSIRO, Nuseed, and GRDC, the proponents, assert that the date for claim 1 of the '357 patent and claim 2 of the '880 patent should be February of 2003. Claim 4 of the '792 patent, the date should be no earlier than November 18, 2008.

When determining the level of ordinary skill in the art, you should consider all of the evidence submitted by the parties including evidence of, number one, the level of education and experience of persons actively working in the field as of the dates listed above, including the inventors and the scientists employed by the proponents and opponents; two, the types of problems encountered in the art as of the dates listed above; and, three, the sophistication of the technology in the art as of the dates listed above, including the rapidity with which innovations were made in the art as of the dates listed above.

The fourth factor provides that before deciding the issue of obviousness for each claimed patent of the patents at issue, you must also consider certain factors which may help to determine whether the invention would have been obvious. No factor alone is dispositive, and you must consider the obviousness or nonobviousness of the invention as a whole.

Certain of these factors include: Were CSIRO, Nuseed, and GRDC's products covered by the claim commercially successful due to the merits of the claimed invention rather than due to advertising, promotion, salesmanship or features of the product other than those found in the claim?

Two, was there a long-felt need for solution to the problem facing the inventors which was satisfied by the

claimed invention?

Three, did others try but fail to solve the problem solved by the claimed invention?

Four, did others copy the claimed invention?

Five, did the claimed invention achieve unexpectedly superior results over the closest prior art?

Six, did others in the field or other opponents praise the claimed invention or express surprise at the making of the claimed invention?

Did others accept licenses under the patents at issue because of the merits of the claimed invention?

Answering all or some of these questions "Yes" may suggest that the claim was not obvious. These factors are relevant only if there is a connection or a nexus between the factor and the invention covered by the patent claims.

Even if you conclude that some of the above factors have been established, those factors should be considered along with all the other evidence in the case, determining whether the opponents have proven that the claimed invention would have been obvious.

There are also factors which can support obviousness in the invention. For example, independently made, simultaneous inventions are evidence that the claimed invention was the product of one of ordinary skill in the art.

The patent law contains certain requirements for the part of the patent called the specification. BASF and Cargill, the opponents, contend that the claims at issue are invalid because the specification of the patents at issue do not contain an adequate written description of the invention. To succeed, opponents must show by clear and convincing evidence that the specifications fails to meet the law's requirement for written description of the invention.

In the patent application process, the applicant may keep the originally filed claims or change the claims between the time the patent application is first filed and the time a patent is issued. An applicant may amend the claims or add new claims. These changes may narrow or broaden the scope of the claims. The written description requirement ensures that the issue claimed corresponds to the scope of the written description that was provided in the original application.

In deciding whether the patent covers this written description requirement, you must consider the description from the viewpoint of a person having ordinary skill in the field of technology of the patent when the application was filed. The written description requirement is satisfied if a person having ordinary skill, reading the original patent application, would have recognized that it describes the full scope of the claimed invention, as it is finally claimed in the issued patent, and the inventor actually possessed that

full scope by the filing date of the original application.

The written description requirement may be satisfied by any combination of the words, structures, figures, diagrams, formulas, or other similar descriptive information contained in the patent application. The full scope of a claim or any particular requirement in a claim need not be expressly disclosed in the original patent application if a person having ordinary skill in the field of technology of the patent at the time of filing would have understood that the full scope or missing requirement is in the written description in the specification of the patent. The written description requirement does not require proponents to prove to the skilled reader that the invention worked.

An inventor may file continuation patent applications. A continuation patent application is an application that claims priority to an earlier filed patent application, which is referred to as the original patent application for the parent patent application.

Continuation patent applications must share the same specifications, as well as inventors, as the original patent application. Thus, continuation patent applications receive the benefit of the invention date of the original patent application, and any new claims must be supported by the specification from the original patent application. Any patent that ultimately issues from a continuation patent is

subject to the same period of patent protection as the patent that issues from the original patent application.

There is nothing improper, illegal, or inequitable about filing a continuation patent application in order to obtain the right to exclude a competitor's product from the market or to amend or insert claims intended to cover a competitor's project that the application or its attorney have learned about during the prosecution of a patent application.

The fact that a patent is a continuation patent does not render it inherently more likely to fail the written description requirement, and it does not change the burden of proof with respect to invalidity. However, it is improper to file such additional or amended claims if they are based upon information obtained in violation of a legal duty.

On March 1, 2008, BASF and CSIRO entered into a contract, the Materials Transfer and Evaluation Agreement, or MTEA, in order to collaborate to jointly evaluate their respective genetic developments to see if there were options for further enhancing the levels of omega-3 fatty acids in canola.

Although the MTEA contract terminated by its terms in 2010, several provisions survived the termination; that is, several requirements of the MTEA continued to bind the parties, even though the contract terminated and they were no

longer working together.

Among the provisions that continued to bind the party after the termination of the MTEA contract are the ownership provisions. In order to succeed in their ownership claim, BASF must show by a preponderance of the evidence that there was a legally enforcing obligation between CSIRO and BASF, that CSIRO breached that obligation, that BASF is entitled to a remedy as a result, and that the appropriate remedy is co-ownership of CSIRO's patents.

CSIRO denies it breached the contract. Under the MTEA, BASF and CSIRO retained ownership of their separate materials, even if they were shared under the MTEA, and could use their own materials for their own purposes outside the MTEA, but during the collaboration under the MTEA contract, jointly treated new generic materials, jointly created genetic lines, and joint research results were jointly owned by BASF and CSIRO immediately upon their creation.

If you find from a preponderance of the evidence that any such genetic materials, genetic lines, or research results were incorporated into any of the asserted patents, then BASF is a co-owner of such patent, and you must find that the opponents do not infringe upon any such patent.

All right, ladies and gentlemen. That completes the Court's instructions. I will have a brief instruction for you after the attorneys finish their argument, but it's time

for our morning break, so you may step into the jury room for your recess.

(The jury exited the courtroom.)

MR. DAVIS: Your Honor, whenever the Court is ready, I need to raise one point.

THE COURT: Well, instruction number 17 does not contain any of the Court's constructions, and I know that some of the constructions I made as a result of the Markman hearing were rendered obsolete by the patents that the proponents chose to assert, but I know that there was one in there about -- the one you wanted me to reconsider, about the --

MR. ZAHEER: The vertebrate limitation?

THE COURT: Huh?

MR. ZAHEER: The vertebrate issue? Yes.

THE COURT: Is that included in any of the patents?

MR. ZAHEER: It is. It says -- it's the term on the page that refers to an Acyl-CoA desaturase. That is in the patents that are asserted.

Your Honor, we've -- taking the Court's instructions, we've gone through and proposed a revision to the table that does two things: One, takes out sort of the legal commentary that was in the chart; and, number two, looks at the agreed glossary or definition of terms that the parties came up with and just inserts those in the relevant

places. And I can hand up -- hand that up to Your Honor.

THE COURT: All right. Well, they should be in the jury's book, too.

MR. ZAHEER: Yes, those are in the jury's book, as I understand it.

THE COURT: They are? Well, we didn't find them when we looked for them.

MR. DAVIS: While counsel is conferring behind me, Your Honor, Your Honor got two paragraphs into instruction number 22 and then made an edit to "cutoff date" and changed that to "date of invention," and then I think Your Honor passed that instruction to Mr. Lang. I just wanted to point out that further down in 22 the words "cutoff date" appear two more times, so Your Honor may need to make that additional change in those other places.

THE COURT: Instruction number 22? I think that's one that we made another correction in.

MR. DAVIS: So that in instruction 22 the second sentence that ended in "person of ordinary skill in the art of the claimed invention as of the cutoff date," Your Honor red-lined "cutoff date" and read "invention," which is fine, but the words "cutoff date" appear at the end of the subsequent paragraph and also appear in the line --

THE COURT: So we should change that to "date of invention"?

MR. DAVIS: And also at Line 3.

THE COURT: Wait a minute. Let me deal with one at a time.

MR. DAVIS: Yes, sir.

THE COURT: That should be as of the date of invention. I've changed it. There's one in the second sentence, and I'm now changing the one in the third paragraph as to "the date of invention."

MR. DAVIS: And then it appears one other time at the arabic number 3 at the end of that line, as well.

THE COURT: Okay. All right. Now --

MS. FLANAGAN: Your Honor, I -- on the claim construction, what was --

THE COURT: I'm sorry?

MS. FLANAGAN: Your Honor, proponents just handed up a revision on the claim construction that is still not accurate. I have hand marked what needs to stay.

THE COURT: Well, do the proponents agree with your change?

MR. ZAHEER: My understanding is that opponents are indicating that there are some terms that were omitted from what I handed up to you, and I believe that they were omitted from the earlier chart, as well. And so I believe that we're fine with reinserting those, the ones that were omitted. I think we're just checking to make sure that we agree on

everything.

THE COURT: Okay.

(There was a pause in the proceedings.)

MR. ZAHEER: So, Your Honor, we are in agreement about -- there, I think, are three terms that were pulled off the list that should not be pulled off the list.

THE COURT: And we also should have the definitions.

MR. ZAHEER: Yeah, so the terms are there, and then the Court's construction is there, and I don't think any of these require additional definitions from the glossary. It's just three items that --

THE COURT: Is the glossary of definitions in the jury's book?

MR. ZAHEER: Yes, it is. It's called "List of Defined Terms," I believe.

THE CLERK: Yes, sir. It's on tab 1. Yes, sir, it's right here. Tab 1. It's a list of defined terms.

THE COURT: Okay.

MR. ZAHEER: And so I think we can just hand this up to Mr. Lang, perhaps, and we'll get those back in.

We're happy to address it with Mr. Lang, as well, if that would be helpful.

THE COURT: All right. You want to add "promoter"? "Seed preferred promoter" should be in there.

MS. FLANAGAN: Correct.

THE COURT: And "promoter" -- this promoter language goes with the statement, "This term requires no construction." That is in there, right? Where it says, "Promoter, a DNA sequence that determines..." that's supposed to be in there?

MR. ZAHEER: So that's the definition from the glossary. We had understood Your Honor wanted to include what you had called decoding the jargon in there for the jury's benefit.

THE COURT: All right. Then we should have the "desaturase" definition, with two of the definitions beside it. You want those in there?

MR. ZAHEER: It's Your Honor's preference. The actual construction of the Court is what is provided at the top, and if it's Your Honor's preference to include the glossary definition, that's what we understood you wanted us to do, and so that's why that's included.

THE COURT: Well, I think it makes sense to do that.

MR. ZAHEER: And we're fine with that.

THE COURT: Okay.

MS. FLANAGAN: Same for opponents.

(There was a pause in the proceedings.)

MR. ZAHEER: Your Honor, "includes" is actually not in any of the asserted claims, so I think the easiest resolution may be just to remove the "includes" line.

THE COURT: Do you agree with that, remove the "includes" line?

MS. FLANAGAN: We can remove the "includes" line.

THE COURT: All right. Now, this -- what's contained in this instruction -- of course, this goes at the end, too, that one little paragraph. We need a copy of this for each of the jury books, right?

All right. Well, that stipulated construction should go in there, too, right?

MS. FLANAGAN: We have --

THE COURT: The stipulated construction where it says, "Brassica plant" --

MS. FLANAGAN: Right.

THE COURT: -- that goes in there?

MS. FLANAGAN: Correct, as well as the "about."

THE COURT: Okay. We'll take a 15-minute break.

(Recess from 11:49 a.m. to 12:16 p.m.)

MR. ZAHEER: Your Honor, we also prepared a revised version of the chart that's agreed between the parties. It's probably the same thing as what I'm being handed.

THE COURT: Did you pass them back their model, too?

THE LAW CLERK: Yes, Judge.

THE COURT: Okay. Well, just make sure that the instruction comports with the model. Does it?

MR. ZAHEER: I think we're checking right now, but I

can hand this up, as well, if that's more efficient.

I'm told that it may not be the same. While we're looking at that, I also wanted to go back to instruction number 22 and just alert the Court that you didn't finish reading the instruction. You only read the first two paragraphs but not the remainder of 22.

THE COURT: All right. Okay.

(The jury entered the courtroom.)

THE COURT: All right, ladies and gentlemen. You'll recall that I was reading what is instruction number 17 to you when I discovered it was missing some parts. Okay. The parts that are missing are the last tab in your jury book. I'm having those duplicated now, and you can substitute what I'm giving you for the last tab in your jury book, because that's incomplete. And that's the reason why the instruction was incomplete, so I'm going to reread part of the instruction for you. And when we finish duplicating it, I'm going to give you a replacement for the last tab in your book, which are definitions that appear in the patent terms.

And so this is instruction 17:

The Judge will now explain to you the meaning of some of the words of the claims in this case and explain some of the requirements of the claims. You must accept these definitions of these words in the claims as correct. For any words in the claim for which you are not provided with a

definition, you should apply their common meaning.

In other words, I didn't write a definition of any terms. We only defined those terms which we felt like needed defining, which were not that many, actually.

You should not take the definitions of the language of the claims as an indication that the Judge has a view regarding how you should decide on the issues that you are being asked to decide, such as infringement, invalidity, and enforceability. These issues are yours to decide. The meanings of the words and the groups of words from the patent so provided are as follows. And we have the chart.

Now, I'm not going to try to read the chart to you because it would just be confusing just to read it. You have to look at it.

And then at the end of the chart it says, the use of the term plain and ordinary meaning or common meaning, with respect to the Court's claim construction in the case, refers to the meaning of a term as viewed from the perspective of a person having ordinary skill in the art. So that's the way you should interpret these terms -- and all the terms -- in the patents.

Now, let's go to instruction 22. Now, there was a -- I didn't read the entire instruction to you because there were some typographical errors in the instruction, so I'll reread instruction 22.

BASF and Cargill contend that claims of the patent at issue are invalid because the claimed inventions are obvious. A claimed invention is invalid as obvious if it would have been obvious to a person of ordinary skill in the art of the claimed invention as of the date of invention. In deciding obviousness, you must avoid using hindsight; that is, you should not consider what is known today or what was learned from the teachings of the patent. You should not use the patent as a road map for selecting and combining terms of prior art. You must put yourself in the place of a person of ordinary skill in the art as of the date of invention.

The following factors must be evaluated to determine whether BASF and Cargill have established that the claimed invention is obvious: The scope and content of the prior art relied upon by BASF and Cargill.

Number 2, the differences, if any, between the claimed invention of the patents at issue that BASF and Cargill contend is obvious and the prior art.

Number 3, the level of ordinary skill in the art as of the date of the invention.

And, number 4, additional considerations, if any, that indicate that the invention was obvious or not obvious.

Each of these factors must be evaluated, although they may be analyzed in any order, and you must perform a separate analysis for each of the claims. I will now explain

each of the claims in the four patents in more detail, which I did in the following instructions.

So that is all of instruction number 22. I have your question here, and you want to know if you can leave as soon as closing arguments are completed because you have family obligations with respect to Halloween. The answer to that is, "Yes." When the closing arguments are over, we may adjourn, and you can come back tomorrow morning and begin your deliberations. It's not on your own. You said can you do it on your own tomorrow morning. You may not begin your deliberations until you're convened in the courtroom and the Court says, "Please retire and begin your deliberations." That's to prevent any accident, such as talking about the case before all the jurors are not present, or whatever. So don't talk about the case until the Court calls you in and then you adjourn to the jury room to begin your deliberations.

All right. We're now going to begin with the closing arguments beginning with the proponent.

MR. NG: May it please the Court.

Ladies and gentlemen of the jury, good afternoon. Again, I'm Michael Ng, representing the proponents, CSIRO, BASF -- sorry -- CSIRO, GRDC, and Nuseed.

On behalf of all of our team, on behalf of our clients, and on behalf of the opponents, we want to say thank

you. Serving on a jury is an extremely important public service, but we recognize that it's a sacrifice; that it's taking you away from your families, from your friends, from your jobs, and we recognize that that's a burden, and we appreciate your time, and we certainly appreciate your attention. That's been noticed, and we want to take that into account and say thank you.

We've learned a lot over the last three weeks, and I think one of the things that we all agree on is that this technology is groundbreaking. Mr. Zacharias said, on the first day of testimony, that it's a game-changer. The world is running out of omega-3 fatty acids, and this technology will fix that. It's important because it's going to relieve the pressure on our oceans, on the wild fish that live there, and it's going to help us grow healthy, vibrant fish in a farmed environment, and that's all going to provide a health benefit for people of all ages.

There's been a race to solve this important problem. CSIRO, Nuseed, GRDC, Cargill, BASF, they were all in the race. There were others in the race; Dow, DuPont, Monsanto. Everyone wanted to teach plants to make omega-3 fatty acids, to grow them in a crop, but one thing is undisputed. CSIRO was the first to get a patent on the invention that allowed canola to grow omega-3s, to get all the way to DHA. That's undisputed, and that should be the end of the story.

That's how patents work. You get a patent to protect your technology, and if you win that race, you get protection for a limited amount of time. Those are the rules. That's the whole point of our patent system, and that system is written right into our United States Constitution.

But rather than respect CSIRO's rights, BASF and Cargill made a choice. They decided to simply ignore CSIRO's patents and move ahead with developing canola that they now admit uses CSIRO's technology.

You heard that they were invited to try to work out a deal with Nuseed, CSIRO's commercial partner, but they didn't do that. They never got permission. Instead, they filed this lawsuit, again, where they admit infringement but offer up a smattering of after-the-fact excuses they hope will convince you that it's okay to trample on our rights.

So now it's up to you. Are BASF and Cargill going to get away with it, or do they, too, have to play by the rules?

Mr. Boles, can we put up slide 2, please?

Here's what you're going to be asked to decide. Your Honor just instructed you. The first issue is infringement, validity, as two components, and then the issue of ownership, co-ownership.

Let's take a quick look at these before we go through them in detail over the next hour.

Let's start with infringement. Infringement is our burden, and it might be hard to believe there's anything easy in this case, but this one is actually an easy one. For six of seven patents that are left in the case, they stipulate that they infringe. There's only one left, and Dr. Kunst explained to you why there's infringement of that, and Dr. Murphy didn't offer any opinions in opposition to that, so we think that will be a relatively easy conclusion.

The rest of these are opponents' burden. They have to prove them to you. For validity, they have to prove it by clear and convincing evidence. That's a higher burden.

So what do they say? What are their excuses? Well, they said we mostly admit that we infringe, but the patents aren't valid because they're obvious. Well, if they were so obvious, why did they, and all the other companies that were working on it, not solve this problem back in the early 2000s, when CSIRO did?

All these other companies tried other approaches, and they failed. They certainly wanted it. They wanted to win the multi-billion-dollar race, but they didn't, because it wasn't obvious. And it wasn't obvious to BASF, either. They said in opening that they were the first to get DHA in plants, and it may be true that they got a smattering of DHA in the leaves, maybe even a tiny bit in the seeds, but there's no BASF patent that they've asserted as prior art.

In fact, they've admitted -- they've walked us through an article that says that in 2005 they hadn't solved one of the critical problems that the CSIRO patent solves. That's the bottleneck problem. So even after we filed our patent, they were still working on it. They didn't have the blueprint. They admit that.

Next opponents are going to say that the patents are invalid because they lack what's called written description. We've talked a lot. We spent a lot of time in this trial talking about whether CSIRO had proven that its invention worked in canola prior to filing its invention. That's not relevant. It's not relevant for the issue of written description.

Your Honor just instructed you that it is not relevant to written description to show, to prove in the patent, that the invention works. We're going to walk through Dr. Kunst's testimony, where she points out where, in the hundreds of pages of the specification, all of the written description necessary to meet this requirement can be found.

Finally, opponents are going to say that the patents are unenforceable because they're co-owners under the MTEA, the Material Transfer and Evaluation Agreement. The reality is that nothing BASF shared with CSIRO under the MTEA made it into CSIRO's patents. CSIRO's witnesses told you that, and

if you look closely at what BASF witnesses say, they'll tell you that, too. They know that. They know the facts aren't there.

You heard from Dr. Murphy, their expert, their technical expert. They could have asked him to go through and look at the patents, look at the material that was shared in the MTEA. They didn't even ask him to do it. Why not? Because they know there's nothing there.

The claims -- at least with respect to the 2004 patents, the Group A patents, which are the first four that you have, don't even make sense. Those patents were filed in 2004, and CSIRO submitted its final application in 2005. That means that forevermore the boundaries of that patent were defiled; they couldn't be moved. So it's impossible that information that BASF gave them three years later, in 2008, somehow makes it a co-owner of those patents. The contract itself says, and BASF acknowledged, that the patent applications were CSIRO's property. It's what they went into. They agreed and they acknowledged that they don't own them, and yet here we are today, in court, with them making that exact claim.

Mr. Boles, can we go to the next slide, please?

There's a lot of variation, and the Court walked you through some of it. You're going to see this in the verdict form, so it will make it a little easier for you. I'd like

to share with you the summary here.

For infringement, all but one of the patents are stipulated.

For validity, based on written description, they aren't contesting Group D. That's the '541 patent.

For obviousness, they're not contesting D or E. That's the '541 and the '084.

There's some things that you don't have to decide.

Mr. Boles, can we go to the next one, please?

Co-inventorship. At the beginning of the trial that was an issue. They're not claiming they are co-inventors anymore. That's been dropped. That's fine, that's their right, but it's not an issue that you have to decide, co-inventorship. The only thing you have to decide is whether they are co-owners under the MTEA, under the contract.

Anticipation. It's a legal word, but what it means is that the patents are invalid because there's a single piece of prior art out there that has everything that the invention has in it. They're not making that claim. They're showing you three different pieces that they say you have to put together to get to obviousness. But there isn't a single piece of prior art -- not a product, not an article, not a patent, nothing -- that had everything that CSIRO's invention has in it.

Next is enablement. Dr. Murphy was asked about this. Enablement has some aspects requiring that the patent tell a reader how to make the invention work. That's also not an issue. Their issue is written description, and for written description, there is no requirement that the patent owner show that it made the invention work.

Next is Nuseed's products. We've heard a lot about Nuseed's product. That's also not relevant. Whether Nuseed is practicing the claims, that it's practicing every claim of the invention, but that's not an issue that the jury needs to decide, that you need to decide.

Finally, BASF's -- or, sorry, second-to-the-last -- BASF's high throughput transformation. We've heard a lot about that; that BASF taught CSIRO how to get the genes into canola. That's also not at issue anymore. You don't need to decide whether it was the high throughput transformation techniques that were shared that created somehow some joint results. That's off the table.

And, finally, Group C. The Group C patent is also out of the case. That's also something you don't need to decide.

So let's walk through these issues.

The first issue is infringement. Once again, most of the claims are stipulated to, six of the seven patents, so the only issue to be decided -- and this, again, will be

reflected on your verdict form, so it will be clear to you in that -- is whether the '541 patent, claim 20 of the '541 patent, is infringed.

Now, again, Dr. Kunst walked us through that. She spent a lot of time, and she had a hard job at the beginning, and we're grateful for your patience. She had to teach us about the technology, all of the details. She had to go first. So we're grateful for your patience in listening to that, but it's important to understand the technology and how it works. Because if you look at the details, you can see why CSIRO's positions are correct.

Dr. Murphy put in testimony about why claim 20 of the '541 patent is infringed. We're going to take a look at that in a second. Dr. Murphy put in none, so on balance, this is what you have to consider.

The issue with that claim is whether particular levels of the oil are found, and really the only dispute is this: It's for the LFK, for the elite event, and the evidence establishes that those levels were met for 2017. The only issue is whether they were also met for 2018 and 2019, and you heard testimony. You heard testimony that the levels would be the same.

Again, Dr. Murphy didn't offer you any evidence in contrary to what Mr. Horton said, and so we submit that this would be a relatively straightforward analysis for this one

remaining infringement issue.

Next let's look at opponents' next excuse, validity.

Mr. Boles, can we go to slide 13, please?

Again, there are two components: One is obviousness, and the other is written description. For both of these opponents have the burden of proof, and it's not a regular burden of proof, it's clear and convincing evidence. If you find their case unclear, you can stop and answer on the verdict form that the patents are valid. If you find it not convincing, you can stop and answer on the verdict form that the patents are valid.

Why do we get this deference? We get this deference because the PTO looked at these, and under the law we're entitled to deference because they're the experts who have reviewed this.

Now, with respect to these patents, they've looked at them very closely and for a long time. Remember that for the Group A patents, there are nine issued patents in the group. That meant that this went through the PTO nine separate times, and they had the prior art in front of them. Sometimes the PTO doesn't get the prior art. They don't find it, for whatever reason, nobody's seen it yet, so they don't have it. And the question is, do we go back and sort of reconstruct what they might have done? Did they make a mistake? Would they have done something different if they

knew about it?

That's not the case here. The prior art was right in front of them, and written description is something that the PTO examiners are good at, because written description requires that you look at the patent itself. You compare the claims, and you look to see whether there's written description. There's nothing outside that they need to look at, so they had all the tools that they needed for written description. That's why we get the deference, and we submit that they did not make a mistake on any of these multiple times that they reviewed the patent.

So let's take a look at obviousness.

Slide 16, please, Mr. Boles.

Your Honor just said that you can apply two tools that are very helpful as jurors. And why we submit these issues to jurors is because we're bringing together all of your collective life experience and your collective common sense. Yes, these issues are highly technical, and, yes, we've had to have explanations from people who have lived their lives in these scientific fields, but at the end of the day we submit them to the jury because it's your life experience and your common sense that sifts through that, and that's what our Constitution says how we decide these issues.

What is common sense, and what does real-life experience say? There were a lot of players in the race to

solve this problem; Cargill, Nuseed, Dow, the British Consortium -- that's at the bottom of that -- Monsanto, DuPont. They all wanted to win this race. A lot of resources went into it on all sides. Some people thought it couldn't be done. You heard Dr. Kunst say it was a pie in the sky when she first heard about it.

They all tried different strategies, and they all got -- most of them failed. It wasn't obvious to them. If it had been obvious to them, they would have all converged on this and would have all done this in the early 2000s. They tried, and they failed, and the ones who are succeeding are the ones who are using CSIRO's invention.

So let's look at the prior art itself. There are only three pieces of prior art that have been asserted. They've searched the world, they went to all these scientists and all these people who live this every day, and these are the three best that they could come up with. And remember again, there isn't a single one of these that discloses all of what's in CSIRO's invention. These are Sayanova, Kinney, and Domergue. Dr. Murphy admits, opponents admit, that each one of those is missing a piece, so you have to put them together. That's the only way you get there.

Now, we're looking at this 20 years later, approximately 20 years later, and looking back it may be easier for us to see, okay, those are three you might put

together, but there's a lot of literature out there. People were studying them. So we have to guard against what we call hindsight bias; that in retrospect, out of all of the different options that were available out there, that it's easier now to see that you might pick three pieces and put them together, but at the time people were looking at all sorts of different pieces.

And you saw that all of those companies tried and all those companies failed, because it wasn't obvious at the time how to put these puzzle pieces together in this particular way to create this particular blueprint, and it wasn't -- again, it wasn't obvious to BASF.

Mr. Boles, can we go to slide 20, please?

BASF told us this. Their own witness described this paper, the Wu paper, in 2005. In the Wu paper they say a low level of DHA was produced, and it's because it might be due to limitation in the host plant's ability to release EPA into the Acyl-CoA pool. That's this shuttling problem that we show here. That's the bottleneck.

How did CSIRO solve it? They solved it using Acyl-CoA type desaturases that worked on the green side, taking you back to the very first day of trial. They figured out how to make it all work on the green side so you wouldn't have to have the shuttling back and forth. In 2005 BASF wrote a paper and said that they hadn't solved this problem

yet; they simply didn't get there first, and it wasn't obvious.

So let's look at what Dr. Murphy does have on his list.

Let's go to slide 23, please, Mr. Boles.

Sayanova. This paper is actually helpful to us because it's a paper that takes a look at -- it doesn't publish its own research, it takes a look at everything that exists out there and sort of summarizes it. And what does Sayanova say? It's skeptical about the possibility of this problem being solved. It points out that DHA had not yet been solved; that it was a future goal. And it doesn't point out the use of the Acyl-CoA solution. It doesn't have it in there. It's a survey. It looked around to all the different research that was being done, everything that was known, but didn't find Acyl-CoA solution.

And you heard His Honor say -- talk about teaching a way. It actually says that using bifunctional desaturases, the enzymes that work on two different points in the pathway -- that that wasn't a good idea, that that shouldn't be done. That's teaching a way. So, rather than teaching about doing this, what CSIRO did, it says, no, that's actually a bad idea.

Let's go to the next one, please, Mr. Boles.

Kinney. This is the one that's in soybeans. It's a

patent. It's a patent that was assigned to DuPont. It was part of their research program. DuPont never released a product. They were one of the ones who tried and failed. And the results have never been duplicated. You heard Dr. Kunst say that they were unreliable. She was talking about the gene gun. They've never been replicated. It, again, did not use the Acyl-CoA pathway, the expressway. It didn't use bifunctional desaturase at the delta-5 and delta-6, and it never produced DHA in seeds. These are somatic embryos, if you will recall that. So Kinney didn't have all the pieces.

Let's go to the next.

Domergue wasn't even a piece of the blueprint. It was in yeast. It was just a couple of steps; it wasn't a whole chain. He used human DNA. As we know, it was off limits. And Domergue identifies the bottleneck as a problem but doesn't have the solution. In fact, if we look outside of this and we look at what they said the next year, the same authors, even the next year they said there's a bottleneck in our approach. They hadn't solved it, either.

And you know how we know that BASF didn't solve it? Do you know how we know that it wasn't obvious to them?

Mr. Boles, can we go to 22, please?

There's no patent. There's no BASF patent that's cited as prior art. You heard that patents are important to

them, you heard that it's part of their strategy. If they had fought to get there, if they were really the first ones there, they would have gotten a patent. There are no BASF patents cited as prior art.

Now, we talked about how the Patent Office had access to each of these three pieces of prior art. They knew about them. They were in the patent. Why would CSIRO do that? CSIRO did that because it wanted to explain to the Patent Office why its invention was different, how it was an improvement over the prior art. That's why you discuss it. They were very open. All three of those were in there.

Mr. Boles, can we go to that slide where we show that?

Over and over, Sayanova, Sayanova and Napier. We've got them all in there. We asked Dr. Murphy about this, and what did Dr. Murphy say? He said that he didn't see Kinney or Domergue in there at all. And then my colleague asked him the question. He admitted, oh, yes, the patent also discusses Kinney. It also discusses DuPont. They're in there, the Patent Office had them, but Dr. Murphy didn't study the patents closely enough to acknowledge that.

Now, Dr. Murphy is obviously a very credentialed scientist, he's held a lot of important positions, but we think we saw two different Dr. Murphys. We saw Dr. Murphy on direct who gave answers, spoke up, could be heard, and on

cross, we saw a different kind of Dr. Murphy. He had a different posture. He didn't speak up. He didn't speak clearly. There was a reason for that. The reason for that is because the opponents were asking him to do something that he couldn't do, which is to support his findings with evidence, with facts. If you look at these articles, if you look at these prior art references, what they say is in there isn't there, and it wasn't obvious because BASF itself told us it wasn't, showed us that it wasn't.

There's one more issue that you'll be asked to address, and it affects two claims. This is claim 1 of the '357 and claim 2 of the '880. Again, this will be in your verdict form, so you don't have to memorize it now. The question on those is whether Dr. Singh came up with the concept in February of 2003, when he had his light bulb moment.

Now, he described in testimony that he had all the pieces in the pathway, conceived that. Now, remember conception is an idea. It was fixed in his head. He corroborated that in a piece of writing when he submitted his application for funding for the program. That was based on him already having that idea. And then we also saw lab notebooks. We saw an order for the zebrafish to get the genes. There's lots of written corroboration that shows both that Dr. Singh had that idea and that between the time that

he had that idea and the time that he filed his patent application, he was working diligently and continuously on that. That's why he brought Dr. Petrie into the project in March, so that he could be unfettered to work on this project.

So we submit that that conception happened in 2003, and defendants have not offered any real evidence in opposition to that. And if you find that that's the correct conception date for these two claims, you're entitled to ignore the combinations of prior art which include publications that came after that date. That's the way the rules work.

Now let's talk about written description.

And can I get a time check, please?

THE LAW CLERK: 49 minutes and 31 seconds.

MR. NG: Thank you. I'm at 49 minutes?

THE LAW CLERK: 49 minutes, 26 seconds.

MR. NG: Let's talk about written description. Again, written description does not require that the proponents prove to the skilled reader that the invention works.

These are voluminous disclosures, hundreds of pages. All the information is in there.

Dr. Kunst -- there were three issues. First, did they disclose the use of canola? The answer is yes.

Dr. Kunst walked you through that. It's right there, first on the list. In fact, it says, more preferably, the oilseed should be canola. That was disclosed.

There's a reason that you use these big lists, and the reason that you use these big lists is so that you can have the benefit of all the different plants that this could go into. BASF did the exact same thing. You saw that right there. Salad vegetables, artichoke, mango, it's all in there.

Second, she said that -- or, sorry -- Dr. Murphy said that it didn't disclose recombinant plant cells. That's sort of the opposite argument, that the list wasn't long enough. The list was long enough. We just saw that.

She said that there weren't certain enzymes disclosed. And Dr. Kunst walked you through this. Ostreococcus, right in there, in both places. Thraustochytrium, right in there. Pavlova lutheri, right in there. And then, finally, there's an allegation for the '084 that certain oil levels weren't disclosed. She also showed you exactly where those are, right in the table.

Now let's turn to co-ownership. This is, in many ways, the meat of this case, and it's a contract. So let's look closely at the contract. Remember my colleague, Mr. Menchel, described this as what's yours is yours, and what's mine is mine. It's only the joint materials that get

shared.

CSIRO's new materials are the constructs containing only CSIRO genes, BASF's new materials are those containing only BASF's genes, and the only ones that are joint are the constructs, those combinations of genes that contain both CSIRO and BASF genes. Those are the only ones. Ladies and gentlemen, those constructs are not in the CSIRO patents, period.

Number 2 --

MR. MENCHEL: Sorry to interrupt.

Can we just have a time check? I don't think that was correct, and Counsel is rushing.

THE LAW CLERK: I have 46 minutes and 44 seconds.

THE COURT: The time he's giving you includes the time for rebuttal.

THE LAW CLERK: Correct.

MR. MENCHEL: Oh, that's how much time he has left?

THE LAW CLERK: Yes.

MR. NG: Okay, the time left. Thank you.

MR. MENCHEL: That was confusing to us.

THE LAW CLERK: I'm sorry. That's how much is remaining.

MR. NG: It makes a little bit of a difference. Thank you for the clarity.

How do we know that these constructs weren't used?

These are the constructs. These are the 12. At the end of the project, BASF sent CSIRO a summary, and it says these are the 13 that we looked at. Only four of them, the ones down here -- Oops.

Mr. Boles, can you get that back, please?

The ones down here are for DHA. Did CSIRO use these? No. Did BASF use them? No. No constructs were identified with commercial levels of EPA and DHA.

Now, remember that the whole point of this agreement was so that the parties could look at whether it made sense for them to work together, and if it didn't make sense for them to work together, to walk away. Mr. Menchel described it as a prenuptial agreement. What's yours is yours, what's mine is mine, only what we have together is ours. And so if we decide to walk away, we have clarity; we know what it is. So with respect to the new materials, we know that these constructs weren't pursued by BASF and they weren't pursued by CSIRO. Both sides walked away, and they did their own thing.

So let's look at the next ownership clause. These are transformed lines. Transformed lines are the plants that got the constructs into them. Who did that? BASF did that in Germany. CSIRO never got them, so we know that the transformed lines aren't something that CSIRO used.

So let's look at joint results, because this is

something that they have pointed to. Joint results are results data information derived from the information from the time period that they were looking at things together.

Excuse me.

See that right up top? But, importantly, the joint results are results with respect to joint transformed lines -- those are the plants -- and joint new materials. Those are the constructs that they put together, those 13 constructs, only four of which were DHA constructs.

It's not everything that they exchanged, it's not all conversations that they had, it's not all information that they might have talked about, it's only information with respect to transformed lines, which CSIRO never got. And the joint constructs, those are those 13 that CSIRO never used.

Mr. Boles, could we go to slide 69, please?

Dr. Petrie told us this. He explained what CSIRO actually did, and I think if you look at Dr. Petrie, and you listen to both he and Dr. Singh, they were honest and truthful people. When they were asked hard questions, they thought about it, and they gave the right answers. They didn't shy away from them. They were forthright, they were forthcoming when they answered both the Court's questions, our questions, and also opposing counsel's questions. Part of your job is to evaluate the honesty of the witnesses, and if you look at Dr. Singh and Dr. Petrie, you'll conclude that

they are not people who would deceive or misrepresent the truth.

And this is what he said:

"So is it your testimony, sir, that by November of 2008, CSIRO had already identified the gene combination that it would continue to use for the next several years and is using today?

"Answer: Yeah, that's correct. This is it.

"Question: And are all of these CSIRO genes?

"Answer: Let me have a look. Yes, they are.

"Question: And just to remind the jury about time, was this before or after CSIRO received the results from the MTEA evaluation of BASF?

"Answer: Oh, a long time -- oh, long before. So we had our own parallel track going," he goes on to explain.

The program that they pursued, the strategy they pursued, the patents that they pursued, the constructs that they pursued were using CSIRO genes, and they had a parallel track going, and he explains further that we kept them very separate. CSIRO knew that if it didn't -- if the parties didn't decide to go forward with the partnership that they weren't going to be able to use the joint materials, the joint constructs, and the joint results. So they knew they had to do something separate to keep their program going forward, because they weren't sure that BASF was going to say

yes to a partnership. And, in fact, they didn't. So what they did was they had a parallel track, and that's what they used.

Mr. Boles, can we pull up the confidentiality provision, as well?

Now, what was not covered? There's an information about -- there's a provision about confidential information, and it makes a specific exception. The information that's in the public domain, except through a disclosure contrary to this agreement -- that means that one of them put it in the public domain even though they weren't supposed to -- or is independently developed by the recipient.

Now, there's been talk about using BASF genes. BASF genes were public, and we're going to get to that in a second. But what's important to remember is that CSIRO was already working with some of those genes because it knew about them. In Australia, you're allowed to use things for research purposes. They were in a public gene bank, and they had some BASF genes.

Dr. Petrie told that he talked to Dr. Bauer about that, and he had no problem with it. It's okay. They're in the public domain. Does that mean that CSIRO could develop a commercial product using those genes? The answer is no, they can't. Are they allowed to use it and analyze it and experiment with it? The answer is yes. Dr. Petrie told you

he told Dr. Bauer about it, and Dr. Bauer had no problem with that whatsoever.

Mr. Boles, can we go back to slide 50, please.

Now, this one is a little bit ironic because the parties, in order to make sure that things were clear about what they came into it with, what was CSIRO's coming in and what was BASF's going in, wrote out a list of some of those things just so they could be sure. And each side signed the agreement with that list in front of them. That was part of the agreement. It was CSIRO saying these things are mine, BASF saying, these other things are theirs, and each side signed the agreement and acknowledged that. They acknowledged what the separate materials were, the background materials going in.

What did CSIRO list on there? The patents. Second at the bottom of that list are the patent applications that were used to develop all of the Group A patents. They led to all of them. That patent application had already been submitted, and BASF acknowledged that it was CSIRO's property.

And Dr. Bauer himself acknowledged that. He said that he couldn't go back in time; that information that he provided in 2008 couldn't have been used in the 2004 patent application. And remember that CSIRO's boundaries were closed. By the time it submitted its final application in

2005, it could never expand the boundaries of that patent family. It could get continuations, but the boundaries were set forever. And so when it received information from BASF in 2008, it couldn't go back and add that on, expand the rights that it had, and Dr. Bauer acknowledged that.

"Question: And you're still asserting that you were a co-owner in the patents that occurred before the meeting -- the agreement that you had?

"Answer: Yeah. I'm not a patent lawyer, so I don't know how these timelines work with the patents, but if it would be before, then it would not be a part. It wouldn't be a part of the joint materials or the joint results."

What they gave them in 2008 could not have been something that was jointly owned in the 2004 and 2005 patents. It's simply impossible.

And so what do we know about what was shared and what made it into the patents? We heard from Dr. Singh. Nothing. Not a thing. What did he say? Let's read this, because it's important:

"Dr. Singh, you mentioned on cross that you cannot put into a commercial product without a license something that is owned by BASF; is that right?

"Answer: Yes, ma'am.

"Question: Did you?

"Answer: Never, no.

"Question: Did CSIRO?

"Answer: No.

"Question: Did CSIRO ever use any BASF material in a product?

"Answer: Absolutely not.

"Question: Did CSIRO ever use any BASF materials in its inventions?

"Answer: Absolutely not.

"Question: Did CSIRO ever use any of the joint results in its inventions?

"Answer: No, ma'am."

There is no reason to believe that Dr. Singh was being anything less than 100 percent truthful when he said this.

But we asked our technical expert to look at this. We asked our technical expert to go through all the materials she had in this case, what BASF said that they had, all the back-and-forth with the MTEA, and to look at the patents. And what did she say?

"Question: Dr. Kunst, in your research of the evidence that you reviewed in this case, have you seen any evidence or any information that leads you to find that CSIRO used any BASF information, methods, gene combinations, or results in CSIRO's patents?

"Answer: I have not."

That stands in stark contrast to what BASF told us. There are two people who could have told us what materials on the BASF sides, what materials from the collaboration made it into the patents. That's Dr. Bauer, who ran it, and Dr. Murphy, who is their technical expert. Let's look at what they said.

Dr. Bauer said he's never even studied the patents or read all of them.

"Question: But you're asserting that you should be a co-owner over the ones that are at issue in this case, correct?

"Answer: I've seen some of those patents, yes. I have not gone through all the patents.

"Question: About how many have you seen, sir?

"Answer: Maybe four.

"Question: Now, am I right, Doctor, that you haven't even carefully studied the patents that are at issue in this case?

"Answer: Yes."

He didn't look. This is Dr. Bauer. He's got patents of his own. He's in a field where people read patents all the time. He knows how to do it. It's part of his job. It's part of what he does professionally. He knows exactly how to do this. Why didn't he do it?

He didn't do it because he knows there's nothing

there. This is a $200 million project on each side. He's claiming that he's a co-owner of the patents that protect that project. He didn't even look, because he knows there's nothing there.

Dr. Murphy. He could have done what Dr. Kunst did. He could have gone through all the materials, put them side by side and said, okay, I see this piece over here and this piece over there. They didn't even ask him. Why didn't they ask him? Because they know there's nothing there.

And so what does Dr. Bauer tell us?

"Question: The truth is, Doctor, that the most you can actually say in this case is that you think that -- well, that CSIRO might have used information from the MTEA in its patents; isn't that true?

"Answer: Yes.

"Question: You don't really know for sure?

"Answer: No, I don't know for sure. I know that we shared the information, but I don't know what -- what extent was used of it."

He's got the patents that he says he's a co-owner of. He could have read them. He didn't, because he knows there's nothing there. He didn't even try. I think we can stop right here with the whole MTEA claim. The most that they can say is that he didn't look. There's nothing there. "Might." "Might" is not enough for BASF to become a co-owner

of CSIRO's patents.

May I have a time check, please?

THE LAW CLERK: 32 minutes, 9 seconds remaining.

MR. NG: Thank you, sir.

Now, we've heard a lot about how certain BASF genes -- remember that genes goes to the enzymes, the Geenen codes, the enzymes. Sometimes we use those interchangeably, but the BASF genes are in the CSIRO patents. Yeah. They've been there from the beginning. So let's take a step back and look at the patents and how they're structured so I can explain why.

Remember that CSIRO invented a blueprint, a process for how you get all the way to DHA. And there are certain steps, and it's different from what other people did. And you just saw that the Acyl-CoA desaturase is doing it all on the Acyl-CoA side of the pool with something different than anybody else did, but the other aspects of it, too, using bifunctional enzymes.

So what did CSIRO do when it wrote its patent? It said, we're patenting the idea, we're patenting the blueprint, the concept, the pathway, but there are lots of genes that are out there, lots of enzymes that go with those genes that can accomplish this. And so the inventors went and looked in the literature. They looked in the patents that were out there. They looked at everything that was

publicly available, and they said, here are the genes and enzymes that can do step number 1, in purple; step number 2 in, I guess, green; step number 3, in yellow; step number 4, in blue; step number 5, in red. It listed them all out. Some of those were in the public domain. Some of them were owned by people like BASF. Some of them -- they also said that you could use homologs. That's the word that means the ones that are similar to this. Some of them weren't even known yet.

A big part of the project that CSIRO was doing was saying, we know that these exist; let's go out and find some that work better. But that's not their invention. Their invention isn't the specific genes. Their invention is the pathway. And they've admitted that there were multiple ways to do this. In fact, that's one of the values of this invention; there were different genes that you could use, different enzymes.

Was it claiming in there that it owned BASF genes? No. It acknowledged that these were BASF's. It said right there. It listed the source. They're publicly known, because you have to put them in the gene bank. There's a library where you can go look them up. There's literature about them. But CSIRO wasn't making a claim that they owned those genes, absolutely not.

So we walked you through this in testimony. We saw

that there were some that ended up on the MTEA, but those were in the patent from the beginning, because they were part of that list. And, again, CSIRO wasn't saying that they owned them.

In the MTEA, when BASF listed those out and CSIRO signed the agreement, it was acknowledging that those were BASF's genes. It said, yeah, those are yours. We can't do our method, our pathway, using your genes without your permission. But they were in there. They were in there for a reason.

Some of the other ones that come down the line, like Ostreococcus tauri, that was published a little bit later by Domergue, and those find themselves in some of the later patents, all publicly known, but this is not a claim by CSIRO that they owned them.

It's the same thing that BASF does. Remember, Dr. Andre testified about what we see down here in the bottom. That's a chart showing BASF's patented construct that it uses for its elite event, LFK. They went to the Patent Office, and they disclosed all the different genes that they used, all the specifics of their LFK elite event. It's right there in the patent.

And you'll remember that he said that it uses genes that came from other places. They aren't the owner of the patents on there, but -- to make a commercial product, they

had to go out and get a license, but they're not the owner of the patents on there. They're in there, and they're acknowledged, because as he acknowledged and as we said and His Honor said in slightly different words, an invention can be, and often is, a combination of previously known things.

You can take the previously known, even previously patented, genes, and if you put them together in a different way, you can get a patent on that. That's exactly what Dr. Bauer said. If you take the patented gene and you use it in a new way, you can get a patent on that.

Now, again, are we claiming that we own those genes? No. And, to be totally clear, CSIRO and GRDC and Nuseed aren't using BASF's genes. They're not. That's what Dr. Petrie testified about. But if we did, we'd need their permission. They've got a patent on the genes; we've got a patent on the blueprint. We need their permission, but it's a two-way street. If they want to use their genes in our blueprint, in our invention, they need our permission. It goes both ways.

We talked about continuation patents, and Your Honor just instructed us -- His Honor just instructed us that there's nothing wrong with continuation patents. In fact, they're good business. You'll see that CSIRO, as soon as it got its original patent application issued in 2010, went back to the Patent Office and said, we've got this property. We

own everything inside of these boundaries, so now we'd like to be specific about the different pieces that are in there so we're claiming it with more particularity.

The jury instruction that you have in your book will say that there's nothing wrong with that. In fact, there's nothing wrong with doing that to protect yourself against a competitor's product that has recently come onto the market. It's right there. There's nothing improper, illegal, or inequitable, which is this Court's instruction about filing a continuation patent application in order to obtain the right to exclude a competitor's product from the market or to amend and insert claims intended to cover a competitor's product that the applicant or its attorney has learned about during the prosecution of the patent application, as long as you didn't get it in an improper way. That's at the end. I want to acknowledge that. But you're allowed to do it.

Remember, Mr. Menchel showed you this analogy: The blueprint. When you have the blueprint and it says 2x4s and nails and bricks and paint, there's nothing wrong with going back and specifying the 2x4s might be oak or pine or maple or cherry.

Now, let's imagine that somebody comes onto the market. I actually looked this up. It's actually a panted one. Somebody put a patent on what's called Fat Head Technology on a new kind of nail.

Could the patentholder go back to the Patent Office and get a continuation and say, one of the kinds of nails that can be used in my blueprint is this Fat Head nail? Absolutely. That's allowed.

Is it a claim that they own the Fat Head nail? No. Is it a claim that they don't have to pay the Fat Head nail Company if they use Fat Head nails? No, but it's a clarification that within the boundaries of the patent in the group of nails, Fat Head nails is one of those. That's perfectly fine.

And so when CSIRO went out and got a claim that covers some of BASF's genes -- and, again, I want to be clear. This is not one of the combinations in the MTEA.

But when they went out and got this, these are four genes that BASF owns and they're using. It's like the Fat Head nails. They're allowed to do it. They're allowed to say, within -- one of the kinds of genes that do this, one of the kinds of delta-6 desaturases, is this sequence ID number 30, the BASF gene, just like saying one of the kinds of nails is the Fat Head nail.

Did CSIRO get this information from the MTEA? No. Neither BASF or CSIRO used the combinations, the constructs from the MTEA. They went in a different direction, so it would be useless for them, because that's not what is in BASF's commercial product. How do we know what's in BASF's

commercial product? Because they told the world. You heard about Andy Beadle's presentation in 2010. This is CX-0699. In that presentation, he told the world, this is what we're using, and so CSIRO rightfully went and wrote a claim that claimed that particular combination. They did it again in their patent.

In the '327, the one that we were just talking about that covers the LFK, they gave all the details about it. That's the bargain you strike with the Patent Office. You give the detail, and you get protection. This is on their particular LFK eventually. By 2016 that was public, and so when CSIRO filed the continuations that are at issue in this case, it knew that information, not from the MTEA but from the presentation and from the patent itself, because that was public.

Can I get a time check again, please?

THE LAW CLERK: 22 minutes, 17 seconds remaining.

MR. NG: Thank you.

You heard Dr. Andre talk about this document, CX-0104. BASF is a sophisticated company. It knows what it's doing. It knows how to protect itself. In fact, even in its partnership with Cargill, it acknowledged that they may not want to be completely transparent. I asked Dr. Andre about that. He acknowledged this is what they do. Again, there's nothing wrong with this; smart business. When you're

talking to someone like a CSIRO or a Cargill, they may become a competitor. You have to take care of yourself. You have to make sure that you're not giving confidential information unless you're protected by a patent or something else. They knew how to take care of themselves.

I want to touch quickly on this. That's an issue because they're not talking about the transformations anymore.

But you heard in opening that CSIRO needed BASF to learn how to get their product into canola. Simply not true. You heard that they didn't get a drop of oil until 2010 -- drop of DHA. Why not? Because CSIRO took a very different approach to its commercialization. BASF decided, because it had this canola factory, this high throughput transformation, that they'd transfer it to canola, and then they would optimize, do all the hard work of optimization once they were already in canola.

CSIRO said, we've got to work smart, so we've got to do something different. So they optimized first before they pushed the button on canola. And what happened when they pushed the button on canola? Was it hard? No, they got it on the first try.

The reason they didn't have a drop of oil until 2010 wasn't because they didn't know how to do it, it was because they weren't yet trying because they were in the optimization

phase. They decided to work smart instead of going to canola and having a brute force approach.

And how did this work out for CSIRO?

Mr. Boles, can we go to slide 88, please?

Worked out pretty well. Right now they're able to achieve 17.3 percent DHA to BASF's and Cargill's approximately 1 percent.

When they focus on EPA -- and I want to be clear, this is in a different seed. When they're focused on a seed that maximizes for EPA, they're still beating BASF's 16.6 to somewhere around 7 percent. That optimization strategy worked out pretty well for CSIRO.

I want to wrap up, before I pass to opponents' counsel, on the issue of ownership and how we can be sure. After seeing the evidence, after seeing that they can't identify anything in the patents that came from them, how can we be sure? How can we reassure ourselves that that's actually true? Because for more than a decade BASF was monitoring CSIRO, and they never alleged that they were co-owners until this year, two years into the case. Even after they filed this case, they still didn't claim that they were co-inventors. It's something they came up with in January.

Look at the details. Dr. Bauer, in 2016, received an e-mail -- sorry. This is Dr. Bauer sending an e-mail

saying that he was surprised today that he got to participate in a presentation by Jonathan Napier and James Petrie at a conference.

"Dr. Petrie presented their canola results, showing 12 to 18 percent DHA with little EPA and other products." This is Dr. Bauer, the head of the project in the MTEA, listening to Dr. Petrie say that they've gotten the results. They've gotten some fantastic results.

What does Dr. Bauer do? Does he claim -- does he say, wait a second, that's mine? I'm a co-owner of that. That came out of the MTEA.

Does he send a letter to Legal? Does he send a letter to his higher-ups? Does he say, We have to spring into action; this is a problem for us, that's ours? No. Read through the exhibit, CX-1287. "A surprising twist." That's what he says. He didn't say they took something that's ours. He didn't say they used something that they shouldn't have. Not once did they raise this.

Remember, they have all the information. Dr. Andre said they read the patents within one week to one month of them issuing. They monitor CSIRO's commercial progress. They've been doing it for years.

In 2013, they had an obligation, an obligation to get freedom to operate, to analyze CSIRO's patents. Did they raise the issue then? No. Did they raise the issue when

they went to get their own patent? No. At no point prior to January of this year, even after the lawyers filed this lawsuit, did they claim to be co-inventors. There's a reason for that.

The reason for that is because the facts aren't there. We haven't seen a single BASF e-mail, a single BASF memo, a single BASF analysis saying, hey, wait a second, that's ours, identifying what in the CSIRO patents is theirs. It doesn't exist.

So what happened when BASF found out about this? Not only did Dr. Bauer say nothing -- slide 96, please -- he complimented CSIRO. In 2012 -- I'll just read this:

"Dr. Bauer was kind enough to obtain the reference. Did you have any further interactions with anybody from BASF?" This is what Dr. Petrie says:

"Yeah. One stands out, which was in 2012, mid-2012, after we had presented our GX7 construct results. At that stage it was in Arabidopsis that we talked about, and we showed the first time that you would get fish oil like levels of DHA in the seed. And we had Ernst Heinz, who was a very senior BASF researcher. He actually came up and sought Surinder and I out, and he shook our hand and said very elegant work, well done, you know, someone's been able to do it."

Not we showed you how to do it, not that information

came from us, not you're doing it in a way that mixes up ours and yours. Nothing. They shook his hand and said well done.

I'll reserve the remaining amount of time for rebuttal. Thank you.

THE COURT: All right, ladies and gentlemen. I think it's about time to take our luncheon recess, so let's come back at 2:30.

(The jury exited the courtroom.)

THE COURT: We'll be in recess until 2:30.

(Recess from 1:29 p.m. to 2:25 p.m.)

THE COURT: Counsel, you'll notice that the jury has been ready every time after the break. So I want to make sure that we are, too, because if we do it, then the jury will follow suit, and vice versa.

We won't take an afternoon break, we'll just complete the arguments and then let the jury go, and then we can accomplish a few housekeeping issues.

All right.

(The jury entered the courtroom.)

THE COURT: Ladies and gentlemen, at this point we'll have the initial opening statement of counsel for the opponents.

MR. CONNALLY: May I proceed, Your Honor?

THE COURT: You may.

MR. CONNALLY: Thank you.

Ladies and gentlemen, thank you. Thank you. There's one thing Mr. Ng and I can agree on, which is that your service is important, and we value it very much. Your service is important to this court, it's important to the patent system, and it's important to BASF and Cargill. And we've seen how diligent you've been, how focused you've been, and Lord knows you've been patient. That's deeply appreciated.

A trial is a search for the truth. A trial is a search for the truth. All these witnesses, all these exhibits, all these binders, these plants, these rules, these sidebar conferences, the white noise, the objections, the arguments, all of it is to help you all find the truth. So let's talk about what's true.

At the beginning, in the middle, and at the end of this case, I told you we'd show you three things: First, BASF was the true innovator who first got omega-3s from canola; second, CSIRO couldn't get omega-3s from canola until it learned how from BASF during the MTEA collaboration; and, third, CSIRO and Nuseed were gaming the patent system, and they're using joint results from the collaboration with BASF to do so. So let's talk about each of those.

Now, you know it's true that BASF is the innovator in canola because you heard it from Carl Andre, and you heard it from Joerg Bauer. You heard about the decades of work,

the $200 million of investment -- thank you, Mr. Sparks -- the dozens of patents we have in omega-3 technology in plants. BASF was the first to get omega-3 from canola in 2004. And in 2005, based on that 2004 data, they published those results, that remarkable achievement to get omega-3 from canola in one of the leading scientific journals in the world, "Nature Biotechnology." They published on their achievement, getting omega-3 from a crop plant, getting it from canola, in the gold standard of scientific journals, at the same time CSIRO is talking to you about its internal grant applications.

Let's look at the timeline that I showed you earlier. BASF, as Dr. Andre explained, got omega-3 fatty acids from Arabidopsis, the model plant, the lab rat plant, in 2002, along with linseed, an oilseed plant. And then they got fatty acids from Brassica, from the canola, in 2004.

Now, our friends at CSIRO, they got omega-3s from the lab rat plant, from Arabidopsis, in 2004. And at that time, they filed this provisional application with the Patent Office saying they had come up with the blueprint, as they call, the blueprint to get omega-3s, not just from Arabidopsis but from every plant in the world. Every plant in the world. That's what they were claiming, we've invented a way to get omega-3s from every plant in the world.

The problem is they couldn't do it -- certainly,

couldn't do it in canola. They were trying for five years. They're going to try and tell you -- or they did try and tell you, well, we weren't really trying, we were just working in the model plant, and we were trying to work smart. We were trying to work smart.

Well, they didn't actually get omega-3s from canola on their own until the spring of 2010. Spring of 2010. This is their timeline. I put the red circle around it, but it's undisputed that they couldn't get omega-3s from canola on their own until 2010, six years after they claimed they had the blueprint for getting omega-3s from every plant in the world.

But we saw the progress report that Dr. Singh submitted to GRDC, trying to get more funding from them. And while he said -- and Mr. Ng just said -- well, the first time we tried the combination that worked, it worked the first time. Okay. But they tried a lot of first generation constructs that failed to produce LC PUFA. They tried on their own and failed. That's what they told GRDC.

And then what did they also tell GRDC -- this is in 2009. We worked with BASF and came up with a second generation construct made up of our genes and their genes. And they ran it through our high throughput system, and, lo and behold, they were finally able to get DNA from canola. So the first time they were able to get DHA from canola was

in the collaboration with us.

And then after the collaboration with us, once they learned how to do it, once they learned what combinations worked, they were finally able to do it on their own in 2010, even though they supposedly had the blueprint, this magic blueprint, since 2004.

Now, at the time in 2009 -- let me back up. In 2004, this blueprint, they claim, is the proof of concept. It's the proof of concept to get omega-3s from every plant in the world. It's the proof of concept to get omega-3s from canola. That's what they told you; that's what they told the Patent Office.

But then look here what GRDC thought in 2009. They were trying to decide whether they were going to continue to invest in this program, and they knew that proof of concept hadn't been achieved in canola, and they were expecting or hoping that CSIRO might be able to get proof of concept in canola by June of 2010. That was what they were hoping.

But they were planning -- GRDC, their investment partner, one of the people suing BASF and Cargill, they were planning for the possibility that CSIRO would fail. They would fail; proof of concept in canola would not be achieved, in which case GRDC would pull the plug. It would pull the plug on its investments.

And then what was CSIRO itself thinking? What was

CSIRO itself thinking? This is a SWOT analysis that they did -- and Ms. Chow went over this with Dr. Singh. A SWOT analysis is a strengths, weaknesses, opportunities, and threats analysis. It's a typical business tool that you use to analyze a program or a project, right?

And so CSIRO itself analyzed the weaknesses of the omega-3 project, and what did they point to? That proof of concept was not achieved in their target crop. This whole case is built on a claim that they got the blueprint, they achieved proof of concept back in 2004, including the concept to get omega-3s out of canola, and yet in 2009 they're acknowledging in their own internal weaknesses analysis that proof of concept had not been achieved in canola, their target crop.

And Ms. Chow asked Dr. Singh exactly this during this trial, two days ago:

"In 2005 you had obtained proof of concept in the Arabidopsis model plant; isn't that right?

"Answer: Yeah, that's correct."

And then she said, "But as of May 2009, proof of concept had not been achieved in the target crop, canola; isn't that right?

"Yeah, that's right," he said. "Yeah, that's right."

CSIRO itself, its lead inventor, chief scientist on

the project, acknowledges that they didn't have proof of concept in canola in 2009.

Now, we also told you we'd show you that CSIRO and Nuseed are gaming the patent system. How do we know that's true? Well, they told you. They told you. They said so in their own internal documents. In their own internal IP strategy meeting, they talk about war-gaming the commercial spaces in the oil. So they told you. And let's see what war-gaming looks like, all right?

This is an e-mail from Rob de Feyter. He's the head of IP strategy at CSIRO. He did not testify in this case. He's the general in charge of war-gaming. All right? And here he says -- and he's talking about a feature of their '357 patent at issue here. He says, "One of the features of that patent is remarkably useful because it's so hard for the patent examiner to find in the prior art."

So a feature of the '357 patent is remarkably useful because it makes it hard for the United States Patent and Trademark Office to do their job. Concealing information from the Patent Office is a remarkably useful feature of the '357 patent.

All right. Let's take a look back at 2005. Now, this came out in the examination of Dr. Singh, but I don't think the import of it was clear at the time. This is an e-mail from Dr. Green, who is the big boss of the omega-3

program. Dr. Singh is the lead inventor, and he's the technical lead, he's the day-to-day scientist, but Dr. Green is the business and scientific head of the program.

And on February 14th, 2005, Valentine's Day 2005, he said to Dr. Singh, "We should be sure that we have records in our lab books of our intention to express our LC PUFA genes in Arabidopsis, canola, linseed, soybean, and Lupins." And then he goes on to say, "If you don't have lab book notes around these intentions, could you add in a brief paragraph yesterday?"

Now, this is going to be important when Mr. Davis talks to you about conception and their claim that somehow they invented this way back in 2003. They came up with a blueprint in 2003, and they're going to point you to their lab notebooks. These lab notebooks are like medical records; they're serious scientific records. Patent litigation, other rights, depend on the validity of these records. Here's the head of the whole program, talking to the scientific lead, telling him to tell his team to backdate their lab notebooks regarding their intentions to express their genes in crop plants.

And here's the part you can't make up. All right? Where do we find this e-mail? Where do we find this e-mail? We find it in Diana Hall's lab notebook. She's Dr. Singh's technical assistant in the lab. So the directive to backdate

lab notebooks she has tucked into her lab notebook. All right? You can't make that up.

Let's talk about our friends at Nuseed. They're not very good at growing canola. They're certainly not good at selling canola. But what they apparently do focus on is threatening people with CSIRO's patents. And so in 2016, when Cargill was getting close to coming to market, Nuseed sent them a letter listing all these patents that they and GRDC and CSIRO have together and essentially saying, Cargill, look, we're throwing a big obstacle for you to get to market; you've got to deal with us. All right?

So what does our side do? What do the opponents do? BASF files this lawsuit. We say those patents aren't any good. They're not enforceable. They're not valid. So we bring this lawsuit to challenge them.

So when you hear Mr. Ng talk about why didn't we speak up, why didn't we say anything, well, first of all, Dr. Bauer left the program in 2010, so he wasn't on the omega-3 program from 2010 on. And, more importantly, the first time they tried to assert any of these patents against us, we brought this lawsuit. Not only did we object, we brought a lawsuit in federal court. So, yeah, we objected.

Now, the interesting thing is none of these patents in this letter -- and both Mr. Davis and I talked about this earlier. None of these patents in this letter are before you

in this case. They're not presenting any of these patents to you, not a one.

What they are doing, and what they did in response to our lawsuit, is they filed a bunch of new patents. They filed a bunch of new patents, all but one filed after this litigation commenced, and all of them issued in 2018. All of the patents you're deciding on were issued in 2018, during this litigation -- during this litigation. So that's what we're talking about here.

In response to our lawsuit, they filed a bunch of new patents, and they filed them targeting our inventions and our product, not to protect their own technology -- not to protect their own technology. They did it for competitive reasons, and they used information they got from the MTEA collaboration to do it.

And let me try to explain to you what I'm talking about. This is a little simplistic, so I apologize. Let's pretend that getting omega-3 from canola is like building a house. Okay? BASF built their house in 2004. Now, at the same time, your friends at CSIRO, they had done research on Arabidopsis, and they had gotten omega-3 from Arabidopsis, the lab rat plant, and they filed this provisional patent application saying that they invented a way to get omega-3 from every plant in the world -- every plant in the world.

And so they put up a patent fence around BASF's

house, right, our ability to get omega-3 from canola, but they couldn't do it themselves. They couldn't do it themselves, right? They couldn't do it. It wasn't until 2010, with our help and after the collaboration, that they finally were able to build their own house, despite having the blueprint for six years, the magic blueprint. For six years they couldn't do it, until we showed them how, and then they built their own house.

Then they threaten us with the patents, and we come after them to get rid of those patents; we filed this lawsuit. And what happens? They're not talking about that patent fence anymore. They're not talking about those patents. What they are talking about are these new patents, this new fence, this new fence that they put up around our product.

But here's the thing: These patents target BASF's and Cargill's product. Their product isn't inside the fence. Their Aquaterra product doesn't use the technology they're claiming to invent in these new patents. It's different technology. This is a patent created to target our product, not to protect their product. They're trying to keep us off the market. That patent is aimed at BASF's and Cargill's product. It doesn't protect the Aquaterra product, because the technology is different, and I'll show you what I mean.

So here are -- here, on the right, is the MTEA and

genes that were identified as belonging to BASF in the MTEA collaboration, including the Thraustochytrium, the delta-6 desaturase, and the P patents, delta-6 elongase. And this -- I always get confused on the numbers, too. This is the '579 patent, in Group A, and Carl Andre explained this. Dr. Andre explained this.

So this is what we disclosed in the MTEA, on the right, and here is now what they're claiming to have invented, starting in 2017, on the left. They're saying, We invented the way to get omega-3 from Brassica, from canola, using a delta-6 elongase, the P patents, and the delta-5 desaturase from Thraustochytrium.

So they're saying they invented the way to get omega-3 from canola using our genes, genes we disclosed to them eight years earlier in the MTEA collaboration.

Same thing in the '792 patent. This is a Group B patent. Again, here are the BASF genes that are identified in the MTEA and the fact that we're using those genes in Brassica, Brassica napus, the Kumily line that you've heard about. And they filed the '792 patent years later claiming that they've invented the way to get omega-3 from canola using our genes -- using our genes.

One more. Again, you've got the Thraustochytrium desaturase identified as belonging to BASF in the MTEA, and then you've got Dr. Singh's lab notes from July 3rd, 2017,

about four days before he files three of the patents at issue in this case, and he talks about using a delta-5 desaturase from Thraustochytrium. And then that shows up in the '033 patent. That shows up in the '033 patent. So they're using what they learned from us in the MTEA collaboration to target our products in their patents.

Now, we also have this exhibit, right? We know it's true they're using the joint results because Dr. Singh has the summary of the joint results from 2009 on the right, the summary of the joint results of the MTEA collaboration tucked into his 2017 diary when he's coming up with the patents at issue in this case. He's got the summary of the joint results of the MTEA collaboration from 2009 tucked into his diary in 2017 at the exact time he's filing the patents, the patents created to target our products, the patents filed after this litigation started in 2017.

And what's his explanation for how this eight-year-old document gets into his diary right at the time when he could use it to target our patents? I have a messy desk. That's what he said. That's what his lawyer said, I have a messy desk. It just fell in there. I don't know -- sometimes I wonder what people expect you're going to believe, but I think you can draw your own conclusions on the messy desk defense.

And let's talk about Nuseed's product, right? So

here's the '792 patent that they filed, and look at all these genes of BASF that it uses. So these are our genes. They can't use these genes without our permission. They're claiming to have invented the way to get omega-3 from canola using all our genes, when they can't actually do this themselves without our permission.

So their product, the Nuseed product uses none of these genes. They're patenting an invention that we practice. They're patenting what we and Cargill are trying to do. That's what they're doing. They're not trying to protect anything they're doing. Mr. Ng was quite open about it. They'll try and tell you, oh, it's okay, the law allows it, it's not -- no, it's not that bad. Well, when you use, improperly use, when you breach the MTEA, when you come after us using information that you got from us, that we shared with you in 2009, you're darn right that's improper. You can't target our products using the information we gave to you. You can't do it.

All right. Mr. Davis and I -- Mr. Davis talked eloquently about the two bargains in this case. The one is the contractual bargain between BASF and CSIRO under the MTEA contract. It's a contract, it's a regular civil obligation. I'm going to talk to you about that, and that's what I'm focusing on.

Mr. Davis is going to talk to you about the bargain

that CSIRO and Nuseed and GRDC struck with the Patent Office when they pursued patent protection for their claimed inventions and how they failed to follow those rules, but I'm focused on the MTEA bargain.

And the question you're going to be asked to answer -- and this is in your verdict form -- is do you find that BASF has proven by a preponderance of the evidence that BASF is a co-owner of any of the following patents-in-suit? And then there will be a chart with all the patents, and you can check "Yes" or "No." All right. What do we need to prove that? I'm going to talk about that in a minute, but first I want to address the burden of proof. All right?

On this contract issue, the burden of proof is the regular standard, which is who do you believe more? Who do you believe more, us or them? It's that simple. The scales of justice. Right? If you believe us a little bit more, we win.

Now, I think the evidence is like this. Right. It weighs heavily in our favor. And I think Mr. Davis is going to point out how very clear and very convincing the evidence is for our side. But even if it were a closer question, all you have to figure out is who is more right, us or them? That's all you have to do.

And let's talk about the MTEA itself. You know, for a contract between sophisticated companies going across

international lines, it's really pretty simple. Usually you have a lot of lawyerly gobbledygook in these things. This one is very clear. It's very clear. Joint results are going to be jointly owned by CSIRO and BASF Plant Science, and any intellectual property subsisting in those joint results is owned immediately upon creation, jointly, by CSIRO and BASF. That intellectual property includes patents, so if those patents are based on joint results, we're a co-owner. It's that simple. It's that simple.

And let's remember the summary of the joint results tucked into Dr. Singh's diary in 2017, when he's coming up with the patents at issue in this case. Now, it's almost comical, but it's not funny. It's not funny. This is the United States Federal Court, this is important patent litigation, and when they cooked up these patents to target our product, using BASF's information, using the joint results of the MTEA collaboration, and when they got caught red-handed, when they got caught, their excuse was a messy desk.

Well, I don't think we've got to say a lot more about that, but there is one thing we can do about it.

This is your verdict form. It's real simple.

(Indicating.)

Trial is a search for the truth. I think you all know what's true, and I think you know what to do.

Thank you.

MR. DAVIS: One of the things, ladies and gentlemen, that you are not privy to, but those of us here in the front of the bar, as well as the Court, is privy to, is that there was quite a wrangling when this case began about who it was that would go first. It's part of the reason why we've been referring to each other as proponents and opponents, because there are claims going both ways. But there was quite a wrangling, and it turns out that my colleagues on the other side of the bar got to go first. And as I've been listening to the testimony, and as you've been listening to the testimony, what I've been struck by is a proverb that I think is compelling. And the proverb says this: It says, The person who speaks first in a lawsuit seems to be right until someone comes and cross-examines.

And I think that bit of Solomonic wisdom has absolutely borne itself out here over the last two weeks. As you heard in the jury instructions, and as you will take care of back in the room, that ultimately, though there are many people in this room, it is the 11 of you, and only the 11 of you, that are judges of credibility.

Judge Morgan has instructed you on the law, but you are the ones who can decide who is credible and who is not. You are the ones who can decide who to believe and how much to believe, and that is based on the evidence that you have

seen here. And I told you in the beginning -- I asked you in the beginning, two weeks ago, to pay careful attention to what was said before this lawsuit began and what you heard in this lawsuit, because there was going to be an important difference.

We're going to talk about some of those things and some of those credibility issues in a moment, but first let's just reflect on what you've heard. I won't retread the ground that we just heard from Mr. Connally, but let's just be clear. BASF did this first, and what Mr. Ng wants you to focus on is whether there was a BASF patent. But there's no question, the testimony is unequivocal, that BASF had it in Arabidopsis first, and they had it in Brassica first.

You heard that from Dr. Andre, and you also heard that from Joerg Bauer. You heard from Cargill witnesses, who told you all the great things that Cargill is doing. You heard from Mark Christiansen. Mr. Christiansen is here still. He went home to Minneapolis, and he came back for this case. You heard from Dr. Willie Loh. He went home and came back for this case because this is important to Cargill. You heard from Keith Horton. Mr. Horton wasn't able to get back, but that's because Mr. Horton is out harvesting the seeds out in Montana right now. I think he testified that there was some snow in Montana, and so the harvest came late, or he would have been back here, too. This case matters to

our client, and it matters to our client because ultimately it matters to people.

We talked about all the work that Cargill does with the testing and how they have the fish feed trials and ultimately what this omega-3 product is going to mean. Mr. Horton said it's an awesome thing, how good Cargill's products are. Dr. Loh talked to you about how Cargill even today is still innovating with their Boost technology. And the reason that's important, ladies and gentlemen, is because that is why there's not infringement for the '541 patent on the Cargill products. And they're not even pushing that anymore.

You see, what Mr. Connally explained is correct. What they did was put a fence around the property as they understood it, and they did that based on the genes that were submitted to the USDA. But the problem with the '541 is recall that that patent related to percentage allocations of ALA, oleic acid. They didn't realize that as Cargill continued to do its work those percentages were going to change. And so it would have been that the '541 patent fell within that scope, as well, but they're not even pursuing that anymore.

So let's talk about some of CSIRO's testimony. I won't belabor this, but you heard Mr. Connally tell you a moment ago Dr. Singh came in here and said that their work in

canola worked in the first go. But, actually, CX-1359, the report that they filed in 2009 with GRDC, showed that it didn't; that it failed.

Dr. Singh came here -- and what you see on the left-hand side there is -- that's actually a statement of counsel, which is not evidence, but counsel told you in opening that there really wasn't going to be any evidence of inventorship, but what you heard was evidence of ownership. And that's what Mr. Connally talked to you about, that Dr. Singh admitted for the '792 they're using BASF's products.

Same thing with Dr. Petrie. Dr. Petrie came here and said that they were using BASF's O tauri to find other genes. There's no question that they were using BASF's products. And why were they doing that? Why is that okay? I don't know. But we do know there's evidence that Dr. Petrie thinks what's happening in this case and what this technology is about is important enough that if $500 million were on the line, that maybe, perhaps, that's just worth a bit of obfuscation. And that's at CX-0796. You'll see that in the evidence that you have.

You heard testimony from Nuseed that was in conflict. The first witnesses out of the gate -- remember Mr. Zacharias, who wanted to set the stage and tell you how much this was worth? The last witness that we put up via

video was his second in command who reported directly to him, the global general manager, Ms. Benita Boettner, and what did she say? There are no sales of Aquaterra, there's no contract, there's nothing. We don't even have a strategic plan.

And Nuseed doesn't practice the claims, and that's because they drafted the claims to cover these products. And we'll talk about why that's a problem from a patent standpoint later.

But the truth is the reason why these patents are invalid is because they broke their bargain. They promised the PTO something, and they didn't do it. I wrote down what Mr. Ng said. When he was talking about the patent application in 2004, what Mr. Ng said is the boundaries were set forever. He's absolutely right. The boundaries were set forever in 2004, and that means in 2017, you can't file a patent application that claims something that's not within those boundaries.

That is exactly what this is about, and you heard that from Dr. Murphy. Dr. Murphy is an expert in LC PUFA. He's an expert in LC PUFA synthesis. He testified at length about his views in this case. And, ultimately, you're going to have to make a credibility determination between Dr. Murphy and Dr. Kunst. And Dr. Kunst said she is not an expert in this area. I didn't say that, she said that. She

said it in her deposition. She fought about it here, and then when she was confronted with her actual statement, she said, oh, it's just semantics.

Do you recall what Mr. Menchel said during the second opening? Details matter. It's not semantics. She came in here to convince you of something, and she doesn't even believe she's an expert in the area of these patents, and she's got credibility issues left and right.

We were on the second day of trial -- do you remember this, CX-0197? This is the protocol that she said was absolutely reliable and she trusted. When you go back in the jury room, ladies and gentlemen, I would ask you to look at it, because it's black, page, after page, after page. And she said it was reliable, but then in the end she said that as a reviewer for scientific journals, this is not even something that she would have accepted, a partial protocol. And yet she relied on it in this case.

So, now, proponents have the burden of proof on infringement, and it's a preponderance, and they have not met it. You'll recall at the very beginning there were two patents at issue; the '346 -- as you heard, that's no longer at issue. What remains is the '541, claim 20, and they're not asserting that against the Cargill product anymore. The 9093, that's the only one that Dr. Kunst talked about, and now they're not asserting that. The only thing that they're

asserting it against is the LFK.

Well, first of all, let's just be clear. Dr. Kunst hadn't even seen the seeds from Cargill, and Mr. Horton told you he sent them to Nuseed's counsel, who was Mr. Sung. He didn't know his name, but that's where he sent them. Dr. Kunst never tested those seeds.

And as it relates to the product from BASF, remember that this patent, ladies and gentlemen, issued in April of 2018. And so what they need to show, what they need to establish, is that BASF's LFK met these two limitations after April of 2018, and there is no evidence of that. What they looked at was 2017 data, before the patent issued. In light of that, they can't meet their burden on the '541 patent.

So when you're back in the jury room, ladies and gentlemen, and you get to this question, which I believe is the first question on your verdict form, we would ask you to check "No," that there is not a preponderance of the evidence that the opponents have infringed claim 20 of the '541 patent.

The proponents also bear the burden of establishing that earlier conception date, that February 2003 date, that they're pushing for two of the claims. That's their burden. And I think I heard Mr. Ng talk a little bit about that, but he didn't show you a lot of evidence. He just said it's been corroborated. What the law requires is that the

corroboration, number one, corroborate the entire invention, everything that's claimed -- not just an order form for a zebrafish, but everything -- and "corroborated" means there's got to be some independent evidence. It can't be the inventor's own notebook, unless it's been actually signed by someone else at the time.

And what I would encourage you to do, ladies and gentlemen, when you go back in the room and actually look at the evidence -- I've got it right here. What they're relying on for corroboration, and CX-184, CX-182, and CX-337, those are all in evidence. And when you look at those, you're not going to see a signature in a laboratory notebook from anyone. And it's not going to be around the time that it was written down. So the only thing that you have to rely on is Dr. Singh's testimony about these 15-year-old documents now that there's a lawsuit. We would submit to you that that's not enough to establish corroboration.

So when you go back in the jury room and you look at question number 3 -- I think it's question number 3; it may be question number 2 on the verdict form -- whether the proponents have established with corroborating evidence that claim 1 of the '357 patent or claim 2 of the '880 patent were conceived by the inventors as of February 2003, that the answer to both of those questions should be, "No."

Now, let's talk about the lack of written

description. Now, Dr. Kunst also -- I think she said she spoke to the inventors for eight minutes. Eight minutes. Everything that's at stake in this case, all the hundreds of hours that she worked, and the fact that they put an expert here in court to support this opinion, and she talked to the inventors for eight minutes -- it took the Judge an hour and a half to read you the instructions in this case. That's a problem, ladies and gentlemen, and you can draw a conclusion from that.

Now, as is often the case, when you represent the patentee, what you want to do is carry the banner that the patent is entitled to a presumption of validity, and that's because the examiners are intelligent, and they're smart, and they're wise, and they're hard-working. And they may be all of those things, but they're not infallible, and that's why we call it a presumption, and that's why it's rebuttable. In the same way that in a criminal case the defendant is presumed innocent until proven guilty, a patent is presumed valid until it is shown otherwise.

The difference there, though, is important, because sometimes jurors aren't used to the notion of clear and convincing evidence. I want to be very clear.

You've probably all heard the standard that's used in criminal cases of beyond a reasonable doubt. That is a higher standard than clear and convincing evidence. If

you're taking away somebody's liberty, you have to have beyond a reasonable doubt. What clear and convincing evidence means is that there is a firm conviction in your mind of a fact. We want to submit to you that there is absolutely clear and convincing evidence of invalidity here.

The Patent Office -- you saw this in the video at the very beginning. The Patent Office makes mistakes, and important information may have been overlooked. And I want to submit to you in this case that important information maybe wasn't provided, like telling the Patent Office, hey, by the way, the sequence IDs that we're claiming here in patent '792, we got those from BASF.

The Patent Office didn't know about that. The Patent Office didn't get to watch the cross-examination of Dr. Singh and Dr. Petrie and Dr. Kunst and look at all the documents and the evidence here. The Patent Office didn't have that. That's why you, ladies and gentlemen, have an opportunity to render a verdict of invalidity here.

Now, there's been a lot of talk about the laundry list. There's been a lot of talk about this, and what you need to take away -- and there's an example here from JX-10 at columns 39 and 40, but I just want to remind you the specification of the Group A patents is identical, so you'll be able to find this laundry list in each one of those patents.

But it's not enough to just write the word down. It's not enough to take the word "canola" and say it's there, we have it. They had Arabidopsis, but what they wrote was a laundry list of all these things. And what you can do, ladies and gentlemen, even though, as you heard Mr. Ng say, and as you heard in the instructions, the law may not require them to have actually done it, the question for written description is whether a person of ordinary skill in the art at the time, in 2004, would have recognized that they actually possessed the full scope of the invention -- actually possessed the full scope.

It's entirely proper for you to look at later documents from their files before this case began that speak to that issue. PX-0191, which is going back with you, is a 2008 document. They're minutes from a meeting taken from CSIRO from their business records in which they admit that Arabidopsis is not predictive of canola, Arabidopsis results don't perform well in canola.

In 2009, GRDC, when considering whether to actually give them more money, expresses, There are three exit ramps here. Two of them have us paying more money and continuing to invest in this, but one of them, the first one, is an off-ramp, and we might want to take that, because proof of concept hasn't been achieved yet. Why would their funder say that in 2009 if they had already done it and if a person of

ordinary skill in the art would have expected that it be done, if it was -- boom -- on the first go we know it's going to work. That's the very hindsight that is problematic, that they are not allowed to take, unless you be misled and think that somehow there was an epiphany between 2009 and now, even last year in 2018, in a draft paper that the inventors wrote, there was a note.

This is a draft, and if you have ever done a draft on a Word document, you know you can add comments and redline. This is a redline from one of the inventors from a paper last year, and they said to each other, don't mention in the paper that canola is more difficult than Arabidopsis. This is their document, PX-0236. When you're considering this issue, you can look at this and see the context back in your room. Mr. Menchel told you that context matters, and it actually does, and for years what they have been saying is this is a problem.

Dr. Kunst acknowledged that there is no data, there are no experiments, there are no figures, there's nothing related to canola at all in the 2004 disclosure, except that in the laundry list it appears either first or second, and since it's listed in a laundry list first or second, it must be there. They must have it. That's not the standard. They have to show actual possession, and they haven't.

Remember when I was asking Dr. Kunst about those

claims that relate to the recombinant plant cell? We also talked about whether those claims required a single construct, and I asked her, and she gave an answer. I wanted to just double down and make sure I heard her right, so I said, Let me ask you again, just so everybody in the courtroom reorients themselves. Are you saying that you believe the claims of the '880 are directed to and limited to a single construct? She said, I do. She was unequivocal about that.

And the problem that they have with that is that Dr. Petrie testified that it wasn't until long after they filed these patent applications that they were even trying to get it in a single construct, because it was too hard. And if they didn't have a single construct until 2010, but their own expert says that the claims are limited to a single construct in 2004, they have a problem.

Let's talk about the sequence IDs. You'll remember this, and I won't belabor this long, but I want you to remember that Dr. Kunst's position was that the four sequence IDs that are actually claimed in the claims at issue, in the '792, they were adequately described just because they were identified in the patent. And I know it kind of bogged down because you have to dig deep in the patent, but we walked through each one of those, and I showed her, Yeah, it kind of mentions those Seq IDs as a part of this laundry list, but

there is no teaching and no disclosure anywhere that a person of ordinary skill in the art would have understood that this specific combination was contemplated by the claims. And that makes perfect sense, because they weren't even thinking about this until they saw it in BASF's product.

And so what did they do? They drafted claims to cover it. The problem is they didn't have that in 2004, and that means they've got a problem from a written description standpoint.

Now, quickly, with respect to the '084, there was a written description issue, you may recall, that related to the percentages of DPA in the '084, claim number 1. This is the claim, if you recall, that, I believe it was, Mr. Zacharias called DHA the gold standard, and apparently gold wasn't worth very much when they filed this claim, because this actually sets a cap on the DHA at 2 percent. And the problem is that they still don't have any information showing that they possessed this invention in 2004.

What they tried to do was walk through Table 10 and Table 12 and Table 17 and try to match up the various percentages. But what you never saw, what was not presented as evidence in this case, was anything showing that the seeds in those tables covered both ranges; 1 to 16 percent for DPA, and less than 2 percent for DHA.

If they didn't have it in the original application

and the boundaries for set forever, that means that when they filed this claim in 2017, it was invalid. So when you go back in the jury room, ladies and gentlemen, and you get to the question about written description, you'll see that the claim is broken out -- excuse me, the question is broken out by claim.

We believe the evidence shows clearly and convincingly that these patent claims are invalid, and so we want you to check, yes, the opponents have proven by clear and convincing evidence that the following patent claims are invalid for lack of written description.

Let's now move to obviousness. That, too, is our burden, and I want to suggest to you that we have absolutely met that burden and that the evidence supports it.

First of all, Dr. Kunst conceded that there was a motivation to combine these references. She said there's really no dispute that a person of ordinary skill in the art would have been motivated to look at these references and work towards producing DHA in a seed, and that's specifically using the blueprint that they talked about for two weeks.

You heard a lot about the Kinney reference. That's persuasive prior art. The Kinney reference is JX-0067. This is the patent that was -- the work that was done by DuPont. And there's been a whole bunch of attorney argument and some questions about whether DuPont actually commercialized that.

I want to suggest to you, ladies and gentlemen, that you could spend all day tomorrow reading the Judge's instructions about obviousness, and you're not going to see anything that says that whether a product was commercialized is relevant to whether a patent about that issue speaks to the obviousness point.

The fact that DuPont didn't do it does not mean that a person of ordinary skill in the art, looking at Kinney, wouldn't have been led to this invention. Quite the contrary, the evidence is that Kinney discloses results in seeds from plants. This is Table 8 that we're looking at. There's been a lot of talk about the somatic embryo, where Kinney got this DHA, but there's a table for seeds in there, as well. Table 10 shows both EPA and DHA.

And you might recall that Dr. Kunst really kind of struggled to answer the question fairly, I think, when I asked her if she thought Kinney disclosed or showed possession, because Kinney had a list. There was a long pause, and she struggled with that, and, in fact, what she said was -- well, we'll get to that slide in a minute, but what we heard was that Dr. Green, whose video we played, the person who hired Dr. Singh, admitted that Kinney was relevant art. He admitted that it teaches the delta-6 pathway. He admitted that it teaches the combined levels of EPA and DPA, and that's in total agreement with what you heard from

Dr. Murphy.

Dr. Green agrees with Dr. Murphy, but Dr. Kunst doesn't agree with any of them. And she acknowledged that, but she said, I can only vouch for myself. But, ladies and gentlemen, I want to submit to you that when an inventor on the patents-in-suit, and the person that hired Dr. Singh, is in complete alignment with what you heard from Dr. Murphy and Dr. Kunst here now, not an expert in this field, disagrees, that you absolutely have the right to decide who to believe and whose testimony you should not.

It's not just them. Dr. Singh recognized that Kinney was the most impressive example in the article that he wrote shortly after that. It's PX-0196 in evidence. He said, "The most impressive demonstration of LC PUFA synthesis in plants has recently been described in reports by Kinney." It's right there. It's on Page 3 of PX-0196.

And in his slides in 2006 -- these are their internal slides. Thirteen years ago, before their lawsuit came up, what Dr. Singh was saying was that Kinney had it. Kinney had it. That's PX-0324. These are Dr. Singh's slides.

But Dr. Kunst, as I said, couldn't commit to saying whether Kinney actually possessed canola. She said she'd have to look at more evidence. She just wasn't sure.

Let's talk about Sayanova. Sayanova discloses the

conventional pathway. How do we know that? Sayanova is JX-39 in evidence. We know that because it says it. The major or conventional aerobic pathway starts with a delta-6 desaturation. And Sayanova is very clear. He says, This is the most obvious approach. And the way they want to distinguish Sayanova is by saying, oh, well, this isn't actually independent research, what this is is a compilation of what other people were doing. That doesn't matter. This is a reference that is prior art that a person of ordinary skill in the art would have been aware of at the time.

And guess what? Dr. Green agrees with Dr. Murphy again on Sayanova. He says that Sayanova describes that conventional pathway, that it teaches the delta-6 desaturase pathway, and that following Sayanova would have produced transgenic plants whose seeds produce 20 percent, by weight, of LC PUFAs. This is one of the inventors on the patents-in-suit and a CSIRO employee, agreeing with Dr. Murphy.

But again Dr. Kunst disagrees, and she says, Well, you know what, I have to acknowledge that Sayanova calls it conventional, but I think that was just an unfortunate use of that word. But, remember, I showed her in the patent where the inventors used the same word.

And were there any doubt -- were there any doubt -- recall that the laundry list of genes that are shown in the

patents-in-suit in 2004, that original application, it listed the genes in the same order. And you'll see it's not alphabetical, so that's not per force, just the way it should have been listed. It's in the same order as in Sayanova.

Lastly, let's talk about Domergue. Domergue is JX-66, and there's no dispute that Domergue teaches the use of the Acyl-CoA pool. Now, what they want to say is, well, it doesn't really -- you know, it's in yeast. But Dr. Petrie used yeast, and a person of ordinary skill in the art would have understood that these references could be combined. When you look at JX-0066, which is Domergue, you'll see that.

And Domergue not only identifies the problem, it suggests the solution. So where are we left at the end of the day? There is a blueprint that they have been discussing this entire case that's the delta-6 pathway to DHA, Acyl-CoA desaturases, bifunctional enzymes, DHA production in seeds in Brassicaceae. Sayanova, Kinney, and Domergue show that, and a person of ordinary skill in the art absolutely would have been led to combine those references.

And let me just leave you with this. You may have heard this in the instruction. When you go back and you look at the jury instructions, what you'll see is -- I think it's called factor 4 -- that there's something called secondary considerations. These are things that might undermine the view of obviousness, and Dr. Kunst admitted that she hadn't

considered any of those. There's no evidence of commercial success. There's none of those things here to suggest that there is objective indications that this is not obvious.

The fact that someone didn't actually do it doesn't answer the obviousness question. If that were the case, we would be talking about anticipation. What obviousness means is that a person of ordinary skill in the art, in 2004, looking at these references, would have been led to the claimed invention, and there's no doubt, based on the evidence that's before you that you will consider, that that is true.

And so when you go back to deliberate, we would ask you to get to the question that asks about obviousness and whether the opponents have proven by clear and convincing evidence that the following asserted claims are obvious, that you would check "Yes."

I'll be back and reserve my last five minutes. Thank you.

THE LAW CLERK: Your last five?

MR. DAVIS: Or so. How much do I have?

THE LAW CLERK: You have 10 minutes 41 seconds.

MR. DAVIS: There you go -- or 5.

THE COURT: All right. We'll hear the rebuttal argument from the proponents.

MR. NG: I'm going to respond to a few of the things

that opponents said.

I agree with them, this is a search for the truth, and I agree with my colleague, Mr. Menchel, that context matters and details matter.

One of the documents that you were shown was CX-1359.

Mr. Boles, can we pull this up?

You were shown this document, and you see in the first paragraph -- or the second paragraph -- that it references a disappointing result. That disappointing result was not about the CSIRO invention that's at issue in this suit, that was about a different project that was done by a Ph.D. student, a plan B. It operated in a completely different pool.

You heard Dr. Singh testify about this. And, by the way, they didn't show this document to Dr. Singh, the author of the document, they showed it to other folks. But Dr. Singh, fortunately, had already testified to it, and what Dr. Petrie corroborated was that the disappointing result which is described in this first paragraph -- it's called the first generation, but it was a completely different project. And, yes, it didn't work. It was not a good plan B.

Plan A was what at the time CSIRO was working on with -- had been working on that at the time was part of the MTEA. And what did they say? "In 2009, we have tested both

single and dual EPA/DHA construct strategies in canola. 12 single EPA/DHA second generation constructs were assembled for transformation in canola. These constructs contained various combinations of CSIRO and international collaborator genes" -- that was BASF -- "and the objective was to transform all of those into canola and Arabidopsis to enable us to identify the best gene set for maximal EPA/DHA synthesis."

That was the invention, but they were careful. Note what else he says here. And he's talking to GRDC as potential collaborator. "Under the terms of the collaboration, all results have been shared by both parties, and the canola material is not to be further worked on by either party."

They were acknowledging that the joint results should not be used. They were being straightforward and honest, and they were honoring the terms of their contract.

And then if you go down to the bottom he says, "It is comforting to know that CSIRO-only genes comprised one of the gene sets that is able to drive maximal ALA and DHA synthesis in canola seeds."

So what did they do? "At CSIRO, a dual construct strategy comprising an EPA and DHA component" -- you remember Dr. Petrie talking about that; they put it in two plants and then bred them together -- "has been adopted in order to keep

the insert size below 20 kilobytes, KB" -- sorry -- "the dual construct compromise of CSIRO-only genes..."

I won't read further.

They recognize, and they told GRDC, we're working on something with BASF, but we can't use the joint results, but it's okay, we have a back-up. And that's what Dr. Petrie said, We had a parallel track. That's what they used.

Mr. Boles, can we please go to our slide 65, please.

We heard again about targeting, about how it might be improper to draft a patent claim that focuses on a product -- a competitor's product that is actually in the marketplace. Again, I'll show what the Court has instructed. The Court has expressly instructed that there is nothing improper, illegal, or inequitable about filing a continuation patent application in order to obtain the right to exclude a competitor's product from the market.

The Court has given us the rules that we have to apply, the law that we have to apply, and that's the rules. That's the law that we're to apply.

"...or to amend or insert claims intended to cover a competitor's product that the applicant or its attorney has learned about during the prosecution of a patent application."

Again, you can learn new information after the fact and use it to focus on that, so long as it's not obtained

improperly or it's in violation of a legal duty.

Mr. Boles, can we please go to slide 71?

Again, the MTEA constructs, the combinations that CSIRO and BASF worked on, were not pursued by either side. That's not what's in their commercial product. So if CSIRO was going to target what had been in the MTEA, they would have been aiming at the wrong thing, because that's not what's out there in the market. How did CSIRO know what was in the market? Because BASF told the world. It told them in 2010 in Dr. Beadle's public disclosure at the conference, and then it told them again in a patent application that was published in 2016. All the details were in there.

CSIRO not only didn't need to go to the MTEA, if it had gone to the MTEA, it would have been aiming at the wrong thing.

Mr. Boles, can we go to slide 59?

So what have they done? They've pointed out that some of the genes, the enzymes that go with it, are listed in the MTEA. That's what you have on the left there. Those genes and enzymes were in the CSIRO patent application from the beginning, from 2004 on. Again, unless they have a time machine, CSIRO didn't learn them in the MTEA, they learned them because they were public.

And, again, CSIRO is not claiming that it owns BASF's genes. They were on the list, along with every single

other known gene that accomplished the functions that CSIRO was describing in its pathway, and CSIRO was not saying we own it -- it was acknowledging the fact in the MTEA that it doesn't -- what it was saying is these are some of the examples of what can be used in the pathway.

So, Mr. Boles, can we go to PX-198?

We've heard a lot about Dr. Singh's diary and the summary that was tucked in there and the conspiracy theory about what it might say or why it might have been there. Again, there was no reason for Dr. Singh to have gone back to the MTEA, because all of the information about BASF's actual product was public.

Let's look at the evaluation, the summary that was actually tucked in there.

Mr. Boles, can we pull up the second page, please, and focus on the second bullet, or the first actual bullet?

What was the conclusion from the evaluation? That CSIRO's delta-5 elongase, EPA to DPA, is currently the only suitable candidate for this step in the pathway. The project actually found that CSIRO's was working the best.

Mr. Boles, can we go down several pages to the alternative strategy, please.

The next one, please. Well, let's focus on those two, please.

And what did CSIRO say at the end? It said that

there were two alternatives; one worked between BASF and CSIRO, and if that doesn't work out, we've got an alternative, CSIRO-only genes. That's what was in Dr. Singh's notebook. There's no conspiracy. There's no secret. That's what this document actually says.

I'd like to look at another document that you were shown.

Can we please turn to Exhibit CX-0796, please?

And can I get a time check, please?

THE LAW CLERK: 6 minutes, 8 seconds.

MR. NG: Left?

THE LAW CLERK: Left, remaining.

MR. NG: They showed you the sentence starting, "It would be pretty unscrupulous, but $500 million is, after all, $500 million and worth a bit of obfuscation." This is from Dr. Petrie.

Look at the sentence before. He's not talking about what CSIRO should do, he's commenting on what BASF is doing. "I am concerned that BASF may publish something dodgy" -- a bit of Australian slang -- "to cloud the area to steer the patent examiners down the path, and they aren't necessarily Acyl-CoA. It would be pretty unscrupulous for BASF to do that, but I guess $500 million is worth a bit of obfuscation."

He's not talking about what CSIRO should do, he's

talking about what they did. Details matter; context matters.

Let's talk about the written description.

Can we pull up CX-1091?

And while we're doing that, Counsel made a point about how much time Dr. Kunst spent talking to our inventors. Now, remember that she reviewed voluminous depositions, she reviewed voluminous statements. She had a lot of information. Written description is determined from the four corners of the patents. You're not supposed to go outside of it to determine whether written description is fulfilled. She did this the right way. She wasn't supposed to go and fill it in with what the inventors said. She did it the right way, applying the correct legal standard.

Can we look at the section that says, "Arabidopsis results do not predict canola," please?

This is a statement that Dr. Bauer made. CSIRO made notes and reported on what Dr. Bauer said. This is not an admission on their own part, that's them saying this is what Dr. Bauer said. They obviously disagreed, because, after all, CSIRO's strategy --

Let's take that down now, Mr. Boles, and can we put up the -- slide 77?

Remember that CSIRO had a different strategy; optimize first, then go to canola. So this entire idea that

we heard about again that we didn't know how to do it until they told us, is completely nonsense. There is no evidence in the record at all that CSIRO tried to take this invention and put it into canola before 2009. And, remember, it takes a year to grow, so it was 2010 when they got it.

CSIRO optimized first and went to canola second. They pushed the button, and as it turns out, that was a pretty smart strategy.

I'd like to just wrap up with this: I'd like to say thank you, again. I'd like to thank you for your time and your attention and your patience.

Cargill and BASF made a choice. They know they infringed, but they decided that they'd go ahead with their product anyway. They decided against cutting a deal and getting permission. They decided they'd file this lawsuit to see whether they could get away with it. That issue is in your hands now. We'd ask that you send the message and tell them that they can't get away with it.

And I'm going to return to what Mr. Menchel said last week when he talked to you in our second opening. We're going to ask you to protect these patents. We're going to ask you to protect the investment that GRDC made on behalf of their farmers, their grain farmers. We're going to ask you to protect them because they're vital to Nuseed's continued existence. As you heard from Mr. Zacharias, this is a

best-of-company proposition. And, most of all, we're going to ask you to protect the life's work of Dr. Singh and Dr. Petrie and the others on their team. Their life's work is now in your hands.

So, again, we thank you, and we look forward to your verdict.

THE COURT: All right. I believe the opponents have what amount?

THE LAW CLERK: I have 10 minutes, 41 seconds. I believe they reserved five minutes.

MR. CONNALLY: No, we'd like to use the whole ten minutes, if we could. I can't deprive Mr. Davis of an audience.

We are just switching over here. Just a moment.

All right. So, very quickly, this notion that they didn't try a first generation in canola and fail and that this was some grad school project, if this was just some grad school project, why is it in their project progress report submitted to their investor, GRDC, a fellow Australian government entity that's funding their program?

They're reporting -- Dr. Singh and Dr. Green are reporting on the progress of the omega-3 program, and they're talking about failure of their first generation. The notion that this was some parallel track or some grad student project is ridiculous. It's ridiculous.

All right. Joint results. The joint results, probably they're in their product, but I can tell you absolutely those joint results are in their patents. Those joint results are in the patents they filed after this lawsuit started. Those joint results guided them in targeting their patents to go after our product. Absolutely, they're using joint results in their patents, and absolutely, we're a co-owner.

Now, Mr. Ng talked about the patent race and winners and losers. Well, there's cheaters, too.

MR. DAVIS: So, ladies and gentlemen, when you go back into the jury room, you'll have a copy of the jury instructions. They're numbered. I just want to call out jury instruction number 7, the last sentence.

It says, "You may disregard an expert opinion entirely if you should decide that any expert is unqualified or lacks objectivity or credibility or if you should conclude that the factual basis or reasoning given in support of the opinion are not proven or sound or that the opinion is outweighed by other evidence."

And perhaps, maybe, you're not persuaded by the fact that Dr. Kunst was willing to come here and rely on a blacked-out protocol, and perhaps you're not persuaded that she wouldn't answer the Kinney question, and perhaps, maybe, even you're not persuaded by the fact that at her school that

an 85 is an A+. But you should be persuaded by this:

Dr. Kunst worked in Dr. Singh's lab, and 15 or 16 years before she showed up on the scene in this case, when she had never even seen the patents, she had already made up her mind. She had decided that what Dr. Kunst -- excuse me -- she decided that what Dr. Singh had done was groundbreaking. She had decided that it was new and useful and nonobvious, and she did that before this lawsuit was filed, before any of the work that has been done in this case was done, before she was hired, and before you were here. And so Dr. Kunst showed up having already made up her mind. You can consider that as you weigh the options.

Mr. Ng says that BASF and Cargill know that we infringe and we decided to go forward anyway, but I told you in the beginning that timing matters. How can that be possible, when the patents that have been asserted in this case didn't exist when BASF and Cargill made the decision to go forward? That's illogical, and it doesn't make any sense.

I'll just leave you with this:

What I just heard was an appeal to your heart strings: Please don't deprive Dr. Singh of his life's work.

No one is taking Dr. Singh's life's work from him at all. Dr. Singh's life's work exists in the product that Nuseed presumably will commercialize and sell. What we're asking you to do is hold Dr. Singh and Dr. Petrie and CSIRO

and GRDC and Nuseed to the bargain that they struck with the Patent Office, that you can't file a patent in 2004 and then try to enforce it in 2019, when it expands your claims beyond what you actually invented.

On the MTEA, if there are claims in other patents that don't relate to what they got from BASF, Dr. Singh still has his life's work. But when you use someone else's stuff and then you get patents on it, you're not taking his life's work, you're taking back what he didn't deserve in the first place.

Thank you for your time and for your consideration. Be safe on Halloween.

THE COURT: All right, ladies and gentlemen. As I said, we'll adjourn now that you've heard the closing argument.

And you've heard me say this to the witnesses repeatedly: I'll ask you to return to the jury room tomorrow morning at 10:00 with the same state of knowledge as you have as you leave tonight.

You're adjourned.

(The jury exited the courtroom.)

THE COURT: I'm going to put the instructions and the verdict form on the podium -- I've got one, too -- and I want counsel to review those and make sure they're in the form that was decided at the charging conference as to the

instructions and as to the verdict form. I think there were a couple of typos we actually corrected this morning. We e-mailed copies of the verdict forms to you last night, but I think there was a correction in one of them, so make sure they're in proper form to go in to the jury.

And I don't know if you finished reviewing the exhibits with Lori, but if you haven't, this would be the time to finish doing so, so that when the jury comes in tomorrow morning we'll be able to send the instructions, the verdict form, and the exhibits into the jury room promptly. So there it is on the podium. Look at it and make sure it's correct.

And I don't know where you stand on the exhibits, as I say, but if you're not already satisfied that the exhibits are in proper form, this is the time to do it.

What are all those big books?

THE CLERK: These are the exhibits.

THE COURT: Really? That many? Good luck, guys.

The last instruction that I give the jury talks about selecting a foreman and asking questions and so forth. That I will give to the jury tomorrow morning.

How about the charts for the jury's --

COURT SECURITY OFFICER: They're in there.

THE COURT: They've already been delivered?

COURT SECURITY OFFICER: Yes, Your Honor.

THE COURT: Okay. Don't remove the jury instructions from the clip.

(There was a pause in the proceedings.)

THE COURT: Have counsel found the instructions to be ready for the jury?

MS. FLANAGAN: Yes, Your Honor.

MS. GONZALEZ: Yes, Your Honor.

MR. CONNALLY: Yes, Your Honor.

THE CLERK: All right. Two instructions, one verdict form, one red folder, one cart of exhibits, one clip.

THE COURT: All right. And you've got your set of the jury instructions?

THE CLERK: I have two sets right here, Your Honor, and Brandon and Josh have gone through them, as well.

THE COURT: All right. Well, Josh should have a conformed copy, as well.

THE CLERK: This is the correct verdict form.

THE COURT: I've got that form, a copy of that.

THE CLERK: Okay.

THE COURT: But I don't have Josh's conformed copy.

THE CLERK: So this will be ready to go tomorrow.

THE COURT: Well, Josh has got to conform his copy to those.

THE CLERK: That's true; although, these are the official ones now.

THE COURT: Well, except we've got another correction.

What happens is I make corrections, and then the next draft puts the things I struck back in there. That's what happened.

(There was a pause in the proceedings.)

THE COURT: Anything further to talk about before we adjourn for tomorrow morning?

MR. ZAHEER: Nothing, Your Honor.

MR. DAVIS: Not for us, Your Honor.

THE COURT: We're adjourned until 10:00 tomorrow morning.

(Proceedings adjourned at 4:15 p.m.)

CERTIFICATION

I certify that the foregoing is a correct transcript from the record of proceedings in the above-entitled matter.

_____/s/_____

Carol L. Naughton

October 31, 2019